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ABSTRACT

This report presents procedures for national mental health that involve many levels of government and draws advice from a range of professional organizations. Due to the enormous impact of depression on the social, human, economic, and public health costs to Australians and the Australian government, this initiative focuses efforts on dealing with and treating depression. Research suggests that gains can be achieved against depression through strategic promotion, prevention, community education, early intervention, and treatment. This report does not attempt to present evidence for treatment; rather it provides readers who have a general interest in health information on how to combat depression. Chapter 1 presents an overview of mental health in Australia. Chapter 2 provides a detailed profile of depression. Chapter 3 describes data on indicators of depression. Chapter 4 looks at issues related to prevention, management, and treatment. Chapter 5 presents examples of intervention projects underway in the Commonwealth, States, and Territories, and chapter 6 considers avenues for future program development. Appendix 1 presents statistical data on depression in Australia, Appendix 2 provides an overview of the gaps in national health related data collection, and Appendix 3 shows the framework for a 3-year plan on depression. (Contains 251 references.) (JDM)

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National Health Priority Areas 1998

Australian Health Ministers' Conference

ED 459 372

Mental Health

A REPORT FOCUSING ON DEPRESSION

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National Health Priority Areas Report

Mental health

A REPORT FOCUSING ON DEPRESSION

1998

Commonwealth Department of Health and Aged Care
Australian Institute of Health and Welfare

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Executive summary

The *National Health Priority Areas Report—Mental Health* is one of a series of biennial reports to Australian Health Ministers on each of the five National Health Priority Areas. It is part of a process that involves various levels of government and draws on expert advice from non-government sources, with the primary goal of improving the health of Australians.

This report is designed to give an overview of issues in the mental health priority area for readers who have a general interest in health, but who are not necessarily experts in mental health. The report focuses specifically on depression as, by targeting an area that imposes such high social and financial costs on Australian society, collaborative action can achieve significant and cost-effective advances in improving the mental health status of Australians.

The report provides a description of mental health, followed by a more detailed profile of depression in Australia. The prevention and management of depression, including differences in treatment for different groups, are then discussed. Examples of current Australian initiatives related to depression are described. Lastly, potential opportunities and future directions are given, to provide a basis for future actions that will be taken forward in the proposed National Depression Action Plan. Each major section of the report is outlined below.

Mental health problems and disorders

Mental health is the capacity of individuals and groups to interact with one another and the environment, in ways that promote subjective wellbeing, optimal development and the use of cognitive, affective and relational abilities. However, the measurement of mental health is complex and much more than the absence of illness; even the experts disagree on the best ways to define and measure mental health.

Mental health problems and disorders refer to the spectrum of cognitive, emotional, and behavioural disorders that interfere with the lives and productivity of people. Mental disorders form a substantial part of the disease burden in Australia. It is estimated that one in five individuals will be affected by a mental health problem at some stage in their life. Some of the major mental disorders perceived to be public health problems are schizophrenia, depression, anxiety disorders, dementia and substance use disorders. Each of these disorders is unique in terms of its incidence across the lifespan, causal factors and treatments.

In the case of depression, it is estimated that it will be the second largest contributor to the world's disease burden by 2020. As depression is associated with other mental disorders and also with many physical disorders, the effective prevention, treatment and management of depression would have a major positive impact on the health and wellbeing of Australians.

Profile of depression in Australia

Depression is often a recurrent disorder, frequently with its first onset in mid-to-late adolescence. During adolescence, the incidence rate for girls is higher than that for boys, and this gender difference persists throughout adulthood. The prevalence of depression declines in older age, except for older people in residential care settings. The experience of depressive symptoms is much more common than

depressive disorders, but also causes considerable disability and distress. Even more disability results when depression is comorbid with another mental or physical disorder. Depression is particularly likely to be comorbid with anxiety.

The 1997 National Survey of Mental Health and Wellbeing reveals that almost six per cent of adults aged 18 years and over suffer from depressive disorders, and the rate is much higher among females than males. The prevalence rate for anxiety disorders is 10 per cent, and again is higher for females than males. In reviewing different rates of depression between males and females we need to consider not just the biological differences that exist but also how male and female gender roles are socially constructed.

Hospital separations for suicide and self-inflicted injury are higher among young people compared with older people and among females compared with males. Suicide rates are higher among males than females by a ratio of almost 6:1 in young people. Suicide rates are higher in rural and remote areas than in metropolitan areas.

Prevention and management of depression

Interventions to impact upon depression are possible across the entire continuum of health care, from promotion, prevention and early intervention through to treatment and maintenance care. While the effectiveness of many promotion and prevention activities is yet to be demonstrated, interventions that improve people's mental health literacy, optimistic outlook, resilience to life stress, and social support appear to be helpful.

Prevention and early intervention activities are particularly relevant for groups that may be at high risk of depressive symptoms and disorders. These groups include mid-to-late adolescents, women in the perinatal period, older people in residential care, children of parents with mental disorders, carers, Aboriginal peoples and Torres Strait Islanders, refugees, and people experiencing adverse life events (such as physical illness and bereavement). Targeted interventions are especially important for these groups.

The treatment of depression occurs through medical and psychological interventions. Of vital importance is the recognition of depressive symptoms, along with comorbid conditions. General practitioners are in a central position to recognise and treat early depressive symptoms and disorders. More severe and complex disorders may require the specialist intervention of a psychiatrist or clinical psychologist. Treatments need to take a biopsychosocial approach, recognising the multiple factors affecting the development and course of depressive disorders. Antidepressant medication has an important role in treatment, particularly for more severe disorders, along with psychosocial interventions that address precipitating and maintaining psychological and social factors. Shared care and good referral networks between primary carers, general practitioners, and specialists are effective models. Training and support in the identification of depressive disorders are particularly important for primary care.

Australia has an active research agenda related to the understanding and treatment of depression, particularly for evaluating pharmacological interventions. In contrast, the evaluation of psychological interventions requires more support to provide a better evidence base.

Barriers to attaining effective treatment include lack of access to specialist services, particularly in rural and remote communities. Furthermore, some groups of people, such as young people, Aboriginal peoples and Torres Strait Islanders, and people from culturally and linguistically diverse backgrounds, require culturally appropriate outreach services. Inadequate funding and lack of ongoing training for practitioners are also barriers to the provision of a pluralistic biopsychosocial approach to treatment.

Current initiatives relating to depression

There are many initiatives relating to depression currently occurring throughout Australia. These cover the entire health care continuum of promotion, prevention and community education; early intervention; management and treatment; and evaluation and monitoring. Within each of these areas, initiatives are occurring in all domains, including Commonwealth government, State and Territory governments, non-government organisations, general practice, as well as other organisations. Future activities need to take advantage of and build upon the vital level of activity underway and widely disseminate outcomes related to current initiatives.

Opportunities and future directions

Opportunities and future directions to impact on depression include the following:

Promotion

1. Identify residential, educational, workplace, community and social environments that enhance mental health, and facilitate their development and adoption.
2. Develop promotion activities that widely inform and encourage people to adopt mentally healthy lifestyle choices. More evidence is required regarding effective mentally healthy lifestyle choices, but those that appear to be mental health promoting include optimistic styles of thinking, coping strategies that enable resilience in the face of life stressors, and physical exercise.
3. Improve mental health literacy through promotion activities and community education—specifically, improve recognition of depressive symptoms and disorders and knowledge regarding the availability and efficacy of different treatment options.
4. Encourage the media and primary care workers, particularly general practitioners, to play a major role in disseminating information to improve the community's mental health literacy.

Prevention

5. Rigorously evaluate and widely disseminate the results of promotion and prevention activities.
6. Begin prevention activities early in life with programs to encourage positive parenting practices that help to develop optimistic and resilient children.
7. Identify and widely implement effective school-based programs that enhance children's resilience.

8. Develop prevention activities to inform people of high-risk situations for depressive symptoms, and gather research evidence to determine how best to deal with high-risk situations.

9. Targeted prevention activities are particularly important for the following high-risk groups: mid-to-late adolescents; women approaching and after childbirth; people exposed to major risk factors; older people in residential care; children of parents with mental illness; carers of people with disabilities; and Aboriginal peoples and Torres Strait Islanders. Support is required for the organisations that come into contact with these groups of people (eg schools, community-based organisations) to develop and provide targeted prevention activities.

Recognition of depressive symptoms and disorders in primary care

10. Support and develop the pivotal role of general practitioners in recognising and treating depression.

11. Provide education to primary care workers to improve the recognition of depressive symptoms, particularly in people from high-risk groups, such as adolescents, women after childbirth, older people in residential care, people presenting repeatedly with somatic symptoms, people exposed to major life stressors, and Aboriginal peoples and Torres Strait Islanders.

Recognition of co-existing disorders

12. Treatment requires determining whether the depressive disorder is secondary to another condition, such as anxiety, and encompassing the other condition within the treatment plan.

Collaborative models

13. Develop and support collaborative models of care, particularly between general practitioners and specialist mental health professionals.

14. Ensure the participation of consumer groups and carers in the development and evaluation of models of care appropriate to specific population groups.

Access to primary and specialist care

15. Improve access to appropriate mental health services for young people, Aboriginal peoples and Torres Strait Islanders, people from culturally and linguistically diverse backgrounds, and people living in rural and remote communities.

16. Provide culturally appropriate treatment models for Aboriginal peoples and Torres Strait Islanders, and people from culturally and linguistically diverse backgrounds.

17. Target appropriate treatment services at young people, particularly those young people at higher risk through early school leaving, being homeless or unemployed, or having a parent with a mental disorder.

18. Enable schools to have a major role in identifying and supporting young people with current depressive disorders and symptoms, as well as those who are at risk through exposure to life stressors. Improve intersectoral links and partnerships between schools and mental health care.

19. Investigate the use of technology in improving access to mental health services.

Best practice evidence-based guidelines, information and training

20. Develop, implement and support the adoption of best practice, evidence-based guidelines for detection and treatment of depressive disorders.

21. Determine ways to enable the mental health workforce to be well trained and up-to-date with best practice.

Funding issues

22. Consider ways in which funding arrangements can be used to improve the management of depressive disorders.

Information, monitoring and surveillance

23. Improve data regarding depressive disorders for high-risk groups, particularly young people, women after childbirth, older people in residential care, Aboriginal peoples and Torres Strait Islanders, refugees, and people living in rural and remote communities.

24. Monitor the dissemination, uptake and effectiveness of guidelines.

25. Design information systems to inform the planning and development of best practice treatment of depressive symptoms and disorders, and maximise input from all stakeholders.

Research issues

26. Determine ways to fund priority driven research on depression.

National Depression Action Plan

27. The development and implementation of the proposed National Depression Action Plan in the years 1999–2001 is a major opportunity to design strategic actions that will improve the mental health and wellbeing of Australians.

Introduction

Background

This report on mental health is one of a series of biennial reports to Health Ministers on each of the five National Health Priority Areas (NHPAs)—cancer control, injury prevention and control, cardiovascular health, diabetes mellitus and mental health.

While each report targets a group of discrete diseases or conditions and the recommended strategies for action are often specific in nature, the NHPA initiative recognises the role played by broader population health initiatives in realising improvements to the health status of Australians. Public health strategies and programs that target major risk factors may benefit several priority areas.

This report on mental health is part of an encompassing NHPA process that involves various levels of government and draws on expert advice from non-government organisations, with the primary goal being to improve the mental health of the Australian population. In recognition of the prevalence, associated social, human and economic costs and public health impact of depression in Australia, the National Health Priority Committee (NHPC), in consultation with the National Mental Health Working Group, agreed to focus its initial efforts on depression as the most appropriate area in which to improve mental health nationally.

The National Health Priority Areas Initiative

Based on current international comparisons, the health of Australians is among the best in the world and should continue to improve with continued concerted efforts across the nation. The NHPA initiative emphasises collaborative action between Commonwealth and State and Territory governments, the National Health and Medical Research Council (NHMRC), the Australian Institute of Health and Welfare (AIHW), non-government organisations, appropriate experts, clinicians and consumers. It recognises that specific strategies for reducing the burden of illness should be pluralistic, encompassing the continuum of care from prevention through to treatment, management and maintenance and based on appropriate research.

By targeting specific areas that impose high social and financial costs on Australian society, collaborative action can achieve significant and cost-effective advances in improving the health status of Australians. The diseases and conditions targeted through the NHPA process were chosen because these are areas where significant gains in the health of Australia's population can be achieved.

From National Health Goals and Targets to National Health Priority Areas

The World Health Organization (WHO) published the *Global Strategy for Health for All by the Year 2000* in 1981 (WHO 1981). In response to this charter, the *Health for All Australians* report was developed, representing Australia's 'first national attempt to compile goals and targets for improving health and reducing inequalities in health status among population groups' (Health Targets and

Implementation Committee 1988). The 20 goals and 65 targets focused on population groups, major causes of sickness and death, and health risk factors.

A revised set of targets was published in 1993 in the *Goals and Targets for Australia's Health in the Year 2000 and Beyond* report (Nutbeam et al 1993). Goals and targets were established in four main areas—reductions in mortality and morbidity, reductions in health risk factors, improvements in health literacy, and the creation of health-supportive environments. However, this framework was not implemented widely.

The *Better Health Outcomes for Australians* report, released in 1994, refined the National Health Goals and Targets process (DHFS 1994). The focus of goals and targets was shifted to four major areas for action—cancer control, injury prevention and control, cardiovascular health, and mental health. As a corollary to this, Australian Health Ministers also adopted a national health policy, which committed the Commonwealth and State and Territory governments to develop health goals and targets in the priority health areas and reorient the process towards population health.

In 1995, it was recognised that there were a number of fundamental shortcomings of the National Health Goals and Targets process. Principally, there were too many indicators (over 140 across the four disease priority areas), a lack of emphasis on treatment and ongoing management of the disease/condition, and no national reporting requirement. In implementing a goals and targets approach, emphasis was placed on health status measures and risk factor reduction. However, no nationally agreed strategies were developed to promote the change required to reach the targets set.

This led to the establishment of the current NHPA initiative. Health Ministers agreed at their July 1996 meeting that a national report on each priority area be prepared every two years, to give an overview of their impact on the health of Australians. These reports would include a statistical analysis of surveillance data and trends for a set of agreed national indicators. It was also agreed that diabetes mellitus become the fifth NHPA.

A consolidated report on progress in all the priority areas was published in August 1997 (AIHW & DHFS 1997), and reports on injury prevention and control and cancer control were published in 1998 (DHFS & AIHW 1998a, 1998b).

Development of the report

The NHPC developed this report in consultation with the Commonwealth and State and Territory governments, the NHMRC, the AIHW, and a wide range of non-government organisations, consumer groups and professional bodies active in the mental health field. An expert drafting group was established to develop the report. Members included keynote speakers at the National Workshop on Depression held in late 1997, and representatives of consumer interests, Aboriginal peoples and Torres Strait Islanders, and people from culturally and linguistically diverse backgrounds. The national workshop brought together a diverse range of people with relevant expertise in prevention, treatment and management of depression and consumer and carer representatives and its proceedings have provided a basis for the current report.

Data development and statistical analysis by the AIHW, including determination of trends and differentials, form the basis of reporting against a set of depression indicators.

Purpose and structure of the report

This report focuses specifically on depression, which is of major concern both in Australia and internationally, and where significant gains can be achieved through strategic:

- promotion, prevention and community education;
- early intervention;
- management and treatment; and
- research, evaluation and monitoring.

The report is designed to provide an overview of the issues for readers who have a general interest in health, but are not necessarily experts in mental health. It does not provide a systematic review of the evidence and does not attempt to be comprehensive. Specialised reviews of the evidence are cited throughout the report and should be consulted by readers who are interested in a more detailed account.

Chapter 1 presents an overview of mental health in Australia, including a definition of the term 'mental health', an outline of the various mental health conditions, and statistics and trends.

Chapter 2 provides a detailed profile of depression. It examines its definition and diagnosis through a lifespan perspective, considers how it differentially affects particular population groups, and describes known risk and protective factors.

Chapter 3 provides data for the NHPA indicators related to depression.

Chapter 4 looks at issues related to the prevention, management and treatment of depression. It covers the broad range of help-seeking behaviours related to depression, from self-help through to seeking specialist psychiatric help. It considers lifespan issues, promotion and prevention, early intervention, management and treatment, and barriers and gaps in service provision.

Chapter 5 presents examples of current major intervention projects being undertaken or supported by the Commonwealth, States and Territories, non-government organisations and others. These projects are briefly described.

Chapter 6 considers avenues for future development. It highlights issues related to program and infrastructure development, funding levers, intersectoral policy arrangements and links, the value of a public health approach to depression, and presents an outline of the proposed National Depression Action Plan under the renewed strategy of the Second National Mental Health Plan.

Appendix 1 presents the first set of priority depression indicators for Australia, against which future reports will be able to determine progress in improving the population's mental health.

Introduction

Appendix 2 provides an overview of the gaps in national mental health-related data collections, as well as technical information to assist in the interpretation of demographic and statistical methods used in the report.

Appendix 3 shows the framework for a three-year plan developed at the National Workshop on Depression, November 1997.

1 Overview of mental health

The health and living conditions of Australians have improved greatly this century. The average life expectancy has increased by more than 20 years, from around 55 years for males and 59 years for females at the turn of the century to more than 75 and 81 years, respectively, in 1994–96 (AIHW 1998a). The infant mortality rate has come down from one infant death for every 10 live births in the 1900s to less than one for every 175 live births in the 1990s. People's real income has also increased greatly during this period, leading to much more material wealth and services (Snooks 1994). There is, however, a marked diversity of population health outcomes in Australia and the continuing poor health and socioeconomic status of Aboriginal peoples and Torres Strait Islanders is but one example (Swan & Raphael 1995, ABS 1997c).

The remarkable progress in physical and material wellbeing for most Australians has not necessarily been matched by gains in mental and subjective wellbeing. There are diverse patterns of mental health among populations, resulting probably from an array of demographic and social factors, continuing gaps in socioeconomic conditions, changing social structures and significant restructuring of the economy. Mental disorders form a substantial part of the burden of disease in Australia.

It is estimated that close to one in five people in Australia will be affected by a mental health problem at some stage in their lives (AIHW & DHFS 1997). Based on the 1995 National Health Survey (NHS), conducted by the Australian Bureau of Statistics (ABS), more than one million Australians are estimated to suffer from a mental disorder with almost one-half of these affected long-term. Depression is the most common (35 per cent), both recent and long-term, mental disorder reported (ABS 1997a).

Although the number of deaths associated with mental problems is low compared with other National Health Priority Areas, mental disorders are responsible for a larger number of hospitalisations, in particular among those in the age group 25–44 years (AIHW 1998b). Mental health problems also account for much disability, incur high direct and indirect costs, and impose a heavy burden of human suffering, including stigmatisation of people with mental disorders and their families.

1.1 Defining mental health

Mental health is the capacity of individuals and groups to interact with one another and the environment, in ways that promote subjective wellbeing, optimal development, and use of cognitive, affective and relational abilities. It refers to an individual's ability to negotiate the daily challenges and social interactions of life without experiencing undue emotional or behavioural incapacity (DHHS 1989). The achievement of individual and collective goals consistent with justice is central to a positive state of mental health (DHFS 1997).

Defined in this way, mental health is much more than the absence of mental illness. It is the realisation of one's potential, shaped by factors such as biological make-up, gender roles, family life, human relationships, work opportunities, educational achievements, and a variety of structural and socioeconomic determinants. At an individual level, it is also a sense of wellbeing and functioning unique to each person.

At a population level, mental health status highlights several crosscutting themes such as inter-group dynamics, culture and identity, and the overall feeling of positive wellbeing (Nutbeam et al 1993). For Aboriginal peoples and Torres Strait Islanders, mental health must be considered in the wider context of physical, emotional and social wellbeing. There must be the understanding that both social-emotional ill health and psychiatric disorders can result from oppression, racism, environmental circumstances, economic factors, stress, trauma, grief, loss, cultural genocide, psychological processes and poor physical health.

1.2 Measuring mental health

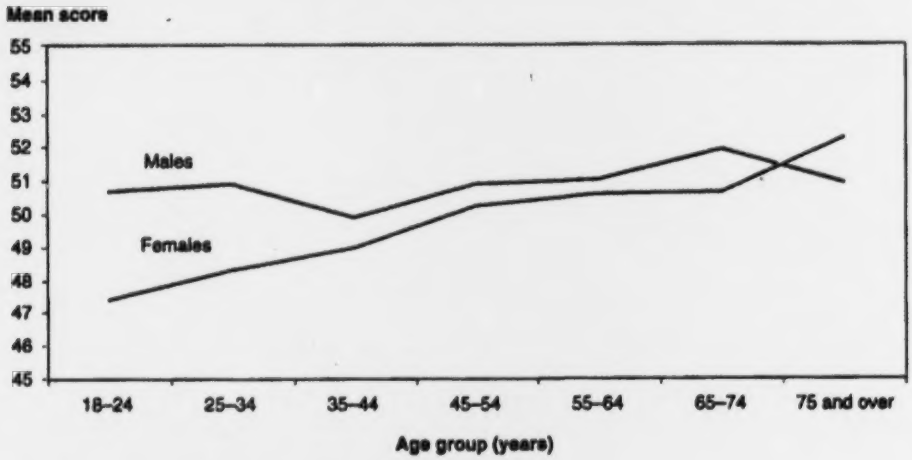
The measurement of mental health is complex; even the experts disagree about the best ways to define and measure mental health (AIHW 1998a). The term 'mental health' is often used when what is really being talked about is 'mental illness' and 'mental disorder'. Measured differences in mental health are more often based on the presence of illness than its absence, and generally do not take into account mental health as a positive attribute.

A variety of inventories and instruments have been developed to measure mental health or wellness. Prominent among these is the Short Form-36 (SF-36), developed by Ware et al (1993) to collect standardised information on eight dimensions of health, including general mental health. The mental health dimension is measured with a score, also called the Mental Component Summary (MCS) score, based on a set of five questions. The range of scores is zero to 100, with a higher score indicating a better state of wellbeing. A short form of the instrument, based on 12 questions (SF-12), is also used for generating information on aspects of mental health in the general population (ABS 1998).

The 1995 NHS has generated some information on the mental health of Australians using the SF-36 instrument. The MCS scores from the survey (Figure 1.1) reveal a marked gender difference in perceived psychological wellbeing for those in the age group 18–24 years, with young males reporting better wellbeing than young females. This difference narrows with age and among respondents aged 75 years and older there is a 'crossover' effect, whereby older females report a greater sense of wellbeing than older males. Overall, for women there is a steady increase in mental wellbeing with age, whereas for men there is a less consistent increase with declines in scores at ages 35–44 years and over 75 years (ABS 1997b). It should be noted, however, that the results of the survey, based on self-reports, are likely to be influenced by whether the respondent has a mental disorder.

Additional information on the general mental health status of Australians with and without a physical condition has become available through the 1997 National Survey of Mental Health and Wellbeing (SMHWB), a household survey also conducted by the ABS (1998). The MCS for this survey, based on SF-12, focuses mainly on role limitations due to emotional problems, social functioning, mental health and vitality. The survey found a small difference in MCS scores between males and females. The survey also found, as expected, lower average MCS scores among persons with a physical condition compared with those without.

Figure 1.1: Mean scores on the SF-36 Mental Component Summary, by age and sex, 1995



Source: 1995 National Health Survey (ABS 1997b).

1.3 Mental health problems and mental disorders

Mental health problems and mental disorders refer to the spectrum of cognitive, emotional and behavioural disorders that interfere with the lives and productivity of people at school, at work and at home, and impact upon their interpersonal relationships. The spectrum covers cognitive impairment and disabilities, phobias, panic attacks, drug-related harm, anxiety, post-traumatic stress disorder (PTSD), personality disorder, depressive disorders, schizophrenia and psychoses.

Mental health problems refer specifically to common mental complaints and symptoms. The term includes the mental ill health occasionally experienced by healthy people in relation to normal life stresses. It may also refer to signs and symptoms of mental disorders, irrespective of whether a clear diagnosis has been made or not.

A *mental disorder*, on the other hand, implies the existence of a clinically recognisable set of symptoms or behaviours associated in most cases with distress and with interference with personal functions (WHO 1992). Mental disorders may require treatment, including hospitalisation, to alleviate the symptoms and to provide rehabilitation (AIHW 1998a).

This distinction between a mental health problem and a mental disorder is not well defined and is made on the basis of severity and duration of the illness. However, there is some overlap between the two categories. A mental health problem may refer to signs and symptoms of a mental disorder regardless of whether or not criteria for clinical diagnosis are met.

Some of the major types of mental disorders that may be perceived as public health problems are schizophrenia, depression, anxiety disorders, dementia and substance use disorders.

Schizophrenia is a group of severe psychiatric disorders that are characterised by major disturbances in thought, emotion and behaviour. The symptoms may include delusions, hallucinations, disorganised thoughts and behaviours (APA 1994). Schizophrenia usually starts in late adolescence or early adult life. These disorders place a heavy burden on the person's family and relatives, both in terms of the costs and stigma attached to the illness. Schizophrenia occurs in one per cent of the adult population aged 20 years and over on an annual basis. Worldwide, around 45 million people are estimated to suffer from schizophrenia (WHO 1996a).

Depression is a mood disorder characterised by feelings of sadness, loss of interest or pleasure in nearly all activities, feelings of hopelessness and suicidal thoughts or self-blame. It is one of the most common mental disorders in the community.

Major depression has a one-year adult prevalence rate of around five per cent in Australia (ABS 1998). The proportion of the adult population suffering from major depression over the lifetime is much larger. A proportion of people experiencing depressive episodes (lowered mood and decreased energy) also go through repeated episodes of mania (elation and overactivity). It is estimated that more than 300 million people suffer from depression worldwide and the number is set to rise significantly over the next two decades (Murray & Lopez 1996).

Anxiety disorders, characterised by symptoms of anxiety, fear and avoidance behaviour, include panic disorders, phobias, obsessive-compulsive disorder and post-traumatic stress disorder. These disorders are estimated to affect some 400 million people at any point in time worldwide (WHO 1996a).

Dementia is a brain syndrome, usually of a chronic or progressive nature, that is manifested by a decline of memory, comprehension, learning capacity, language and judgement as well as the ability to think and to calculate (WHO 1996b). The age of onset for dementia is usually late in life with people over 85 years having the highest prevalence (APA 1994). It is estimated that around 22 million people have dementia worldwide.

Substance use disorders result from harmful use or dependence on drugs and/or alcohol.

Two major classifications, WHO's *International Classification of Diseases*, tenth revision or ICD-10 (superseding ICD-9) (WHO 1993) and the American Psychiatric Association's (APA 1994, 1996) classification as given in its *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition or DSM-IV (APA 1994), are in common use for systematically grouping mental disorders (see Chapter 2, Section 2.1).

1.4 Measuring the prevalence of mental disorders

Measuring the prevalence of mental disorders in the community is complex, as they are usually clinical diagnoses (ABS 1998). The 1995 NHS provides some information on the prevalence of self-reported mental disorders in Australia (ABS 1997a). Specific information on mental disorders has, however, been obtained through the 1997 SMHWB. The survey used the Composite International

Diagnostic Interview (CIDI) to diagnose selected mental disorders among Australian adults (ABS 1998).

Under the 1997 SMHWB, approximately 10,600 persons aged 18 years and over were interviewed, selected from a random sample of households. Information was recorded on more common mental disorders (depression, anxiety and substance use disorder) that occurred during the 12 months before the survey. The survey topics also covered the level of disability associated with these disorders, as well as the health services used (and perceived need for health services) as a consequence. Information on physical conditions and a range of demographic and socioeconomic characteristics was also collected (ABS 1998). Further details on the 1997 SMHWB survey are given in Appendix 2.

Information on mental disorders such as schizophrenia is being collected through a complementary survey of low prevalence psychotic disorders. Mental disorders that are more prevalent in older persons, such as dementia and Alzheimer's disease, were also not determined from the 1997 SMHWB because of the difficulty of identifying these conditions in an interview-based household survey. Furthermore, older people living in institutional settings, such as nursing homes and hostels, were not included in the survey. The 1997 SMHWB, therefore, may have underestimated the prevalence of mental health conditions for older people.

The 1997 SMHWB was designed to provide information on the prevalence of a range of mental disorders for Australian adults only. The Survey did not include children and adolescents. The results of the child and adolescent component of the SMHWB will be available in 1999.

There are several limitations to a household survey with a sample size of just over 10,000 in estimating the prevalence of mental disorders in specific population groups. For example, while mental disorders may be highly prevalent among Aboriginal peoples and Torres Strait Islanders, it is not possible to determine reliably the extent of disorder through a general population survey of this size. Similarly the numbers are too small to undertake a systematic comparison of prevalence rates between rural, remote and metropolitan areas.

1.5 Prevalence of mental disorders in Australia

Table 1.1 lists the distribution of common mental disorders in Australia based on the 1997 SMHWB. Over one in six Australian adults were determined by computer-based CIDI to have experienced anxiety, affective or substance use disorders at some time during the 12 months before the survey. While both males and females had similar overall prevalence rates, females were more likely to have experienced anxiety disorders and affective disorders. On the other hand, substance use disorders were more commonly prevalent among males.

Table 1.1: Prevalence of common mental disorders in Australia, 1997

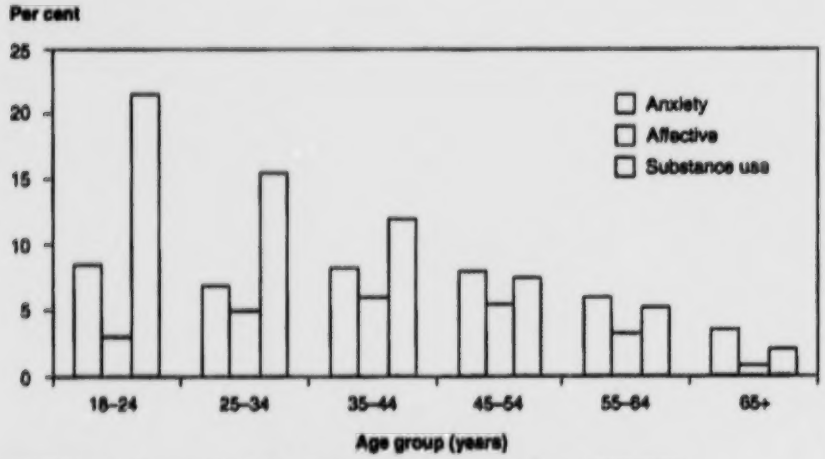
Mental disorders [a]	Males		Females		Persons	
	'000	Per cent	'000	Per cent	'000	Per cent
Anxiety disorders						
Panic disorder	36.7	0.6	133.8	2.0	170.6	1.3
Agoraphobia	49.2	0.7	101.9	1.5	151.1	1.1
Social phobia	161.4	2.4	207.3	3.0	368.7	2.7
Generalised anxiety disorder	156.8	2.4	256.0	3.7	412.8	3.1
Obsessive-compulsive disorder	19.3	0.3	29.2	0.4	48.6	0.4
Post-traumatic stress disorder	153.3	2.3	285.8	4.2	439.2	3.3
Total anxiety disorders	*470.4*	*7.1*	*829.6*	*12.1*	*1,299.9*	*9.7*
Affective disorders						
Depression	227.6	3.4	465.3	6.8	692.9	5.1
Dysthymia	63.4	1.0	88.3	1.3	151.7	1.1
Total affective disorders [b]	*275.3*	*4.2*	*503.3*	*7.4*	*778.6*	*5.8*
Substance use disorders						
Alcohol harmful use	285.4	4.3	123.8	1.8	409.2	3.0
Alcohol dependence	339.8	5.1	126.9	1.9	466.7	3.5
Drug use disorders [c]	206.9	3.1	89.2	1.3	296.0	2.2
Total substance use disorders	*734.3*	*11.1*	*307.5*	*4.5*	*1,041.8*	*7.7*
Total mental disorders [d]	1,151.6	17.4	1,231.5	18.0	2,383.1	17.7
Total persons	6,627.1	100.0	6,837.7	100.0	13,464.8	100.0

(a) During the last 12 months prior to interview.
(b) Includes other affective disorders such as mania, hypomania and bipolar affective disorder.
(c) Includes harmful use and dependence.
(d) A person may have more than one mental disorder. The components when added may therefore be larger than the subtotals or total.

Source: ABS (1998).

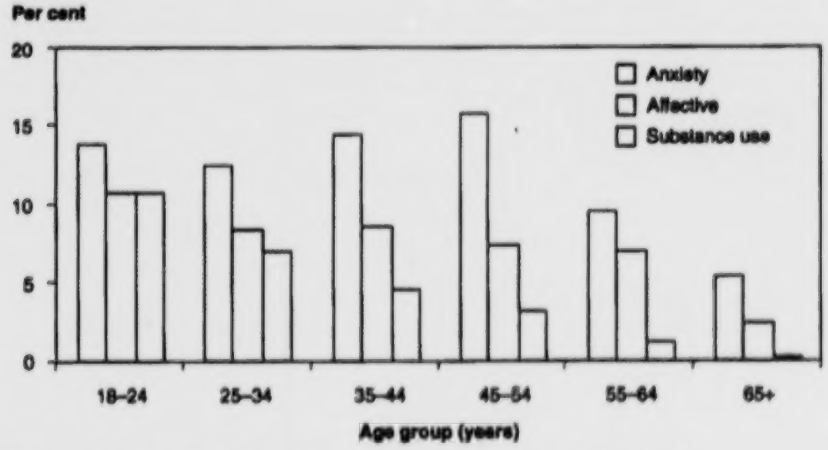
Figures 1.2a and 1.2b present the distribution of common mental disorders in Australia in various age groups by gender and type of disorder. Young males aged 18–24 years had the highest prevalence of these mental disorders (27 per cent). The prevalence declined to around six per cent among persons aged 65 years and over. The much lower prevalence rate for anxiety disorders among females aged 55 years and over in comparison to those in the younger age groups is noteworthy, as is the steady decline in substance use disorders with age for both males and females.

Figure 1.2a: Age-specific prevalence of common mental disorders/problems among Australian males, 1997



Source: 1997 National Survey of Mental Health and Wellbeing: Adult Component (ABS 1998).

Figure 1.2b: Age-specific prevalence of common mental disorders/problems among Australian females, 1997

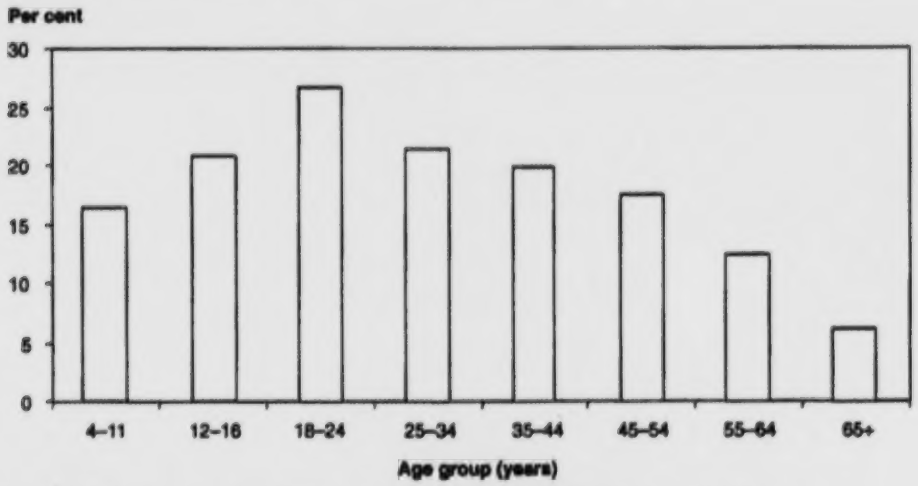


Source: 1997 National Survey of Mental Health and Wellbeing: Adult Component (ABS 1998).

No national estimates of the prevalence of mental disorders among children and adolescents are available. The 1993 Western Australian Child Health Survey (Zubrick et al 1995) does, however, provide some information on the prevalence of mental health problems among children and adolescents aged 4–16 years. Figure 1.3 combines information from this survey and the 1997 SMHWB to provide a comparative picture of the prevalence of mental health problems between children and adults in Australia. The figure reveals considerable morbidity in childhood

with a steady rise to early adulthood and a gradual decline thereafter. The limitations of combining information from two surveys with varying population bases and sampling frames should, however, be kept in mind while interpreting the results presented in Figure 1.3.

Figure 1.3: Prevalence of common mental health problems in children and of common mental disorders in adults



Source: Ages 18+ years from 1997 National Survey of Mental Health and Wellbeing (ABS 1998); and ages 4–16 years from 1993 WA Child Care Health Survey (ABS, 1995).

Prevalence of mental disorders in specific population groups

The prevalence and types of mental disorders are known to vary with age, gender, and across population groups. Importantly, the symptoms of a disorder, and the specific ways in which a person may experience it, also vary markedly from one culture to another. An association between socioeconomic factors and mental health also exists, such that people who are socioeconomically advantaged are at lesser risk of mental disorders than those who are disadvantaged (Kleinman & Cohen 1997).

The Burdekin report identified a range of population groups that may be at increased risk for mental health problems in Australia (Human Rights and Equal Opportunity Commission 1993). Population groups considered at high risk to develop mental health problems or with special mental health issues are children and adolescents, older Australians (particularly those in residential care), Aboriginal peoples and Torres Strait Islanders, rural and remote area populations, and people from culturally and linguistically diverse backgrounds. Homeless people, women, people with dual and multiple disabilities, and forensic patients and prisoners are also reported to be at increased risk for mental health problems.

Children and adolescents

Almost one out of five children and adolescents suffer from a mental health problem or disorder within any six-month period (Zubrick et al 1995). The onset of most mental disorders occurs in mid-to-late adolescence (Sawyer et al 1990, Kosky

& Hardy 1992). It is also recognised that mental health problems and mental disorders developed during this period are more likely to become chronic and to impact upon future psychosocial development (Rutter & Smith 1995).

The mental health problems and disorders of most concern among children and adolescents include depression and anxiety disorders, disruptive behaviours, self-injury, first onset psychosis, and body image and eating disorders (particularly among girls). The factors predisposing to mental health problems early in life include coercive and affectionless parenting styles, divorce, bereavement, trauma, child abuse, disability, not having a key support person, poor peer relationships, adverse school environments and genetic determinants. Prominent markers of increased propensity to mental health problems are poor school attendance, aggressive behaviour and substance use disorders.

According to the 1993 Western Australian Child Health Survey, nearly one out of six 4–11 year olds have had a mental health problem compared with more than one out of five 12–16 year olds (see Figure 1.3). When asked if they had felt under strain, stress or pressure in the six months prior to the survey, eight per cent of 12–16 year olds reported feeling extreme levels of stress; more than one-third of these respondents were also found to suffer from mental health problems (Zubrick et al 1995).

The Royal Australian College of General Practitioners (RACGP) is currently conducting a national survey, 'Young People in Your Practice' of 15–24 year olds (Beckinsale 1999). To date, over 3,000 young people have been surveyed out of the planned 15,000. Preliminary results reveal that around 12 per cent of young people claim to be depressed most of the time and almost six per cent had recently considered (planned) suicide. Some young people who scored high on suicidal ideation reported being sexually abused, were confused about their sexuality, and frequently used drugs including alcohol. In comparison, young people actively looking for work, but who could not find the job they wanted, were more likely to be depressed than to have suicidal thoughts.

Older Australians

The distribution of types of mental disorders changes with increasing age. Although the prevalence of mental disorders such as anxiety and substance use decreases with age, other disorders such as dementia occur with greater frequency. Dementia is increasingly recognised as a significant contributor to the mental health problems of the elderly. The prevalence of dementia is increasing because of better awareness and earlier diagnosis and because more people are living long enough to reach the ages at which the risk of dementia is highest.

The 1997 SMHWB estimated the total prevalence of the common mental disorders (depressive, anxiety and substance use disorders) to be about six per cent among those aged 65 years and over. An additional six per cent of people aged 65 years and over are estimated to have dementia. The risk of dementia increases significantly with age and the prevalence of dementia among those aged 80 years or more is almost 20 per cent. Among the elderly in residential care, the prevalence of dementia is even higher. Rosewarne (1997) found that over 28 per cent of hostel residents and 60 per cent of nursing home residents have some form of dementia.

The prevalence of depressive disorders decreases with age among those who live in the community, but depressive symptoms and depressive disorders are common

among those in residential aged care (Parmalee et al 1989). Underdiagnosis of depression often occurs in older people (Bowers et al 1990, Friedhoff 1994). It has been suggested that depression may be twice as common as dementia (Snowdon 1987).

Aboriginal peoples and Torres Strait Islanders

Mental health has been identified only recently as a priority by Aboriginal peoples and Torres Strait Islanders. This is because stigma, cultural misunderstanding, involuntary confinement, and a failure of past mental health policies and approaches have led many Aboriginal and Torres Strait Islander communities to be hesitant to discuss mental health issues in the public arena. The National Indigenous Mental Health Data Workshop, held in Brisbane 13–14 November 1996, attempted to identify Indigenous peoples' issues and concerns about data collected on mental health. The workshop was auspiced under the National Mental Health Strategy and the main concern was the need for community ownership of data, improvement of data systems, data collection processes and the collection of culturally appropriate meaningful data, incorporating traditional and spiritual Indigenous beliefs. While there are no current national statistics available, local investigations have shown that loss, separation and traumatic experiences for Aboriginal peoples contribute significantly to psychosocial morbidity. These factors correlate strongly with the presence of depressive symptoms and disorders (McKendrick & Thorpe 1994).

No understanding of mental health outcomes could take place without recognising the impact of trauma, grief and loss for Aboriginal peoples and Torres Strait Islanders. These factors have undoubtedly had an impact on physical as well as mental health, yet there are no data available to quantify their extent and role. Studies in one health service show that these risk factors are key variables contributing to the high levels of psychiatric disorder found in Aboriginal and Torres Strait Islander communities, in particular to a very high frequency of depression (Swan & Raphael 1995). The high rates of incarceration and entry into the criminal and juvenile justice system for Aboriginal peoples and Torres Strait Islanders are also risk factors. These are issues for mental health treatment and prevention services provided in correctional settings.

Rural and remote area populations

The health of populations living in rural and remote areas of Australia is worse than that of those living in capital cities and other metropolitan areas (Mathers 1994, Strong et al 1998a). However, limited national information on the prevalence of mental health problems and disorders among people living in rural and remote areas makes it difficult to quantify these differences.

Results from the Women's Health Australia project reveal lower levels of stress among females living in rural and remote areas compared with their counterparts in urban areas, although the number of stressful life events experienced by females from these three geographic areas are similar. Ratings of self-reported mental health using the SF-36 MCS scores are similar among females from various areas, with mean scores of around 48, 47 and 46 among those living in remote, rural and urban areas, respectively (Brown et al 1997).

Strong et al (1998a) have recently compared death rates for suicide and self-inflicted injury in Australia using the rural, remote and metropolitan area (RRMA)

classification. They have found the rates to be significantly higher among males from 'large rural centres' and 'other remote areas' when compared with those living in 'capital cities'. In contrast with males, death rates for suicide and self-inflicted injury were the highest among females living in metropolitan areas and the lowest among those living in remote areas.

People from culturally and linguistically diverse backgrounds

The prevalence of mental health problems and disorders vary greatly amongst various communities around the world (Kleinmann & Cohen 1997). These differences do not completely disappear upon migration to Australia, although better living conditions may reduce the extent of the variation. In some cases, migration and resettlement may result in negative mental health outcomes for individuals belonging to these population groups.

According to the 1997 SMHWB, persons born in Australia had a higher prevalence of mental disorders (19 per cent) than those born in the main English-speaking countries (USA, Canada, UK, Ireland, South Africa, and New Zealand). The latter, in turn, had higher rates (16 per cent) than those born in countries where English is not the main language spoken (14 per cent). The relative differences were higher among males than females. These patterns correspond well with those observed for physical health (Strong et al 1998b).

The Longitudinal Survey of Immigrations to Australia (LSIA)[1], conducted by the Department of Immigration and Multicultural Affairs aimed to determine the self-reported mental health status of immigrants in Australia and their utilisation of health services, by country of birth, non-English-speaking background and English-speaking background. Kliewer and Jones (1997) report the percentage of female immigrants with a minor psychiatric illness was higher than their male counterparts (male 27.3, female 30.8), and similarly for utilisation of medical services (males 45.2, females 58.4). The National Heart Foundation's 1983 Risk Factor Prevalence Survey (RFPS) also reports that immigrant males tend to have a lower prevalence of mental disorders than immigrant females for the native-born aged 25–64 years (males 23.6, females 28.6). Although the RFPS rates are lower than the LSIA immigrants of the same age (males 28.6, females 32.20), the results for the total foreign-born (males 27.0, females 32.3) were similar to the LSIA immigrants.

Analysis by Kliewer and Jones (1997) shows that immigrants with a non-English-speaking background constitute a heterogeneous group in terms of their health status and medical service utilisation. Immigrant health status is more strongly associated with the ability to speak English well, rather than immigrant status alone. Inability to use English effectively may reduce the chances of gainful employment as well as hinder access to services. Other studies show little evidence of a relationship between length of residence and mental disorder in Australia (Jayasuriya et al 1992, Minas et al 1996).

Using samples from the National Heart Foundation's 1983 RFPS and LSIA Kliewer and Jones (1997) report that immigrant males tend to have a lower prevalence of mental disorders than immigrant females at all ages, except for those aged 55–64 years.

[1] The measurement of mental health in LSIA was based on the General Health Questionnaire-12 (GHQ-12).

Experiences of torture, trauma, loss, unemployment, discrimination and being of refugee status all contribute to a vulnerability to mental disorders (Zubrick et al 1997). Several studies have confirmed the poorer health status of refugees compared with immigrants of other categories (Kliewer & Jones 1997).

Other risk factors

Measuring the effect of risk factors on mental disorder is important, but little information is available on a national level. A variety of health determinants and risk factors are likely to contribute to mental disorder. The MCS scores of the 1995 NHS, for example, reveal the effect of employment status, with adults aged 18–64 years scoring the highest for mental health and wellbeing when employed (ABS 1997b). In contrast, smokers report poorer mental health and wellbeing compared with both those who had never smoked and those who are ex-smokers.

1.6 Health care utilisation

People with a mental disorder, or those at risk of developing a mental disorder, receive health care from a variety of health professionals. The settings in which these services are provided range from primary health care to specialist treatment in psychiatric hospitals. Treatment received in community health centres from nursing and allied health professionals also contributes significantly to the management of mental health problems.

The impact of various mental disorders on health services is not uniform. For example, although low in prevalence, some of the mental disorders utilise or require resources disproportionate to their numbers. Disparities in resource use can be identified through a comparison of the utilisation of mental health services and the prevalence of mental disorders.

Mental disorders and health service use

Information on health services used by persons with and without a mental disorder was collected as part of the 1997 SMHWB. The survey found that approximately 56 per cent of persons with affective disorders, 28 per cent of persons with anxiety disorders, and 14 per cent of persons with substance use disorders had used health services in the 12 months before the survey (ABS 1998). For depression, this proportion rose to 64 per cent. In all age groups, depressed females tended to use health services more often than males. In both males and females, those in the age group 35–54 years were the highest users of mental health services.

Health care use by provider type

Information on health care utilisation and providers by type of mental health service is variable. While there is national information available about people who have been hospitalised with a mental problem or associated disability, limited data are available on other health services utilised by these persons.

A brief description of types of mental health care services, along with information on the utilisation of these services and the workforce, follows.

Primary health care

A range of professionals and health workers provide primary health care. In 1996, there were 20,516 primary care providers in Australia. More than six per cent of these were practising in the special interest field of counselling and psychotherapy. The primary health care practitioner is in a unique position to play a key role in the prevention and early management of mental disorders. In particular, general practitioners play a pivotal role in the provision of primary health care services, and in providing access to medication, specialist care, hospitals and other health care services.

The 1997 SMHWB reveals that of those who reported having a mental disorder, 29 per cent had consulted a general practitioner for depression in the 12 months prior to the interview. In their 1993 survey, Harris et al (1996) found that general practitioners had treated about one-fifth of their patients for anxiety or depression in the previous 12 months; 52 per cent were prescribed at least one medication for the problem.

While general practitioners tend to refer people to psychiatrists if they are depressed or a suicide risk, those with anxiety are not often referred (Harris et al 1996).

Private specialist care

In 1996, there were 1,943 specialists practicing psychiatry. In addition, there were 552 psychiatry specialists in training who worked on average almost 49 hours per week (AIHW 1997b).

One out of 65 Australians visits a private psychiatrist at least once a year (1.6 per cent in 1995–96, and 1.5 per cent in 1996–97). The 1997 SMHWB also reports that almost eight per cent of people with mental health problems consulted a psychiatrist in the 12 months before the survey.

The number of private psychiatry services funded by the Medicare Benefits Schedule (MBS) has continued to grow (DHFS 1998) although this trend has slowed down lately. The average number of psychiatric services per psychiatric patient has declined from more than eight in 1992–93 to less than eight in 1995–96. The number of patients treated, adjusted for variation in population numbers, also increased by less than two per cent in 1995–96 over the previous year, compared with an annual average of more than three per cent through the previous decade.

Community mental health services

Over the last few years, there has been a move away from segregated, institutionalised mental health care to a system that integrates hospital services with care provided in community settings (Australian Health Ministers 1992). While the role of large public psychiatric hospitals in providing mental health services has been significantly reduced, these services have been transferred to general public hospitals.

Most people with mental disorders are managed outside the hospital setting by community mental health services. People requiring short-stay hospital management are cared for more appropriately in specialised psychiatric units of acute care hospitals than in large psychiatric hospitals. In addition, residential units have been established within the community. The community mental health services are provided through a variety of government and non-government agencies.

To date, there are limited national data available on community care for people with mental disorders. Some information on community care for mental disorders has been generated through the Mental Health Classification and Service Costs (MH-CASC) project, but the degree to which the data are transferable to the general Australian population is unknown, as comparable data are not yet routinely collected nationally. MH-CASC sampled only specialised mental health services, which do not treat all mental disorders.

The MH-CASC project has identified that approximately 38 per cent of people receiving mental health care in the community had the principal diagnosis of schizophrenia and related disorders (DHFS 1998). Mood disorders were the second most common cause, accounting for about 22 per cent of people receiving community mental health care.

Ten per cent of the people receiving community care, according to MH-CASC, were treated for disorders of childhood and adolescence (DHFS 1998). Mixed disorders of conduct and emotions accounted for most episodes of care.

1.7 Distribution of mental health providers

Since the role of public psychiatric hospitals in providing mental health services changed considerably, the mental health workforce employed in these hospitals has reduced significantly. A decline of almost 40 per cent in the number of persons employed in psychiatric hospitals was noted between the 1991 and the 1996 mental health censuses. By the 1996 census, there were 8,424 persons (total staff, including domestic and maintenance staff) employed in psychiatric hospitals (46 per 100,000 population). These declines in staff numbers notwithstanding, the workforce of the public and private psychiatric hospitals still makes a large contribution to the provision of mental health services in Australia.

The decline in hospital staff numbers involved in providing specialist mental health care has been partially offset by a strong growth in employment in ambulatory mental health care and in community residential care services. In the last three years, there has been a six per cent increase in medical staff and a 21 per cent increase in allied staff providing services in community settings. The overall number of nursing staff has remained stable during this period, although the balance has shifted from public hospital nursing to community health nursing.

This redistribution of public mental health services has altered the relative proportion of various types of workers. Whereas domestic and maintenance staff numbers declined by 20 per cent between 1991 and 1996, the proportion of staff providing care in community settings has increased from 27 per cent to 37 per cent between 1993 and 1996. These trends are in line with policy changes that encourage an increased proportion of mental health care to be provided in community settings.

Mental health workforce

Access to private psychiatric services is unevenly distributed in Australia since almost 87 per cent of psychiatrists practise in a capital city, 4.8 per cent in major urban centres, 4.7 per cent in large rural centres, and 3.7 per cent in other areas (AIHW 1997b). This distribution departs significantly from the population distribution in Australia (see, for example, Strong et al 1998a).

In 1995–96, specialist mental health services employed a total of 1,126 psychiatrists and psychiatry registrars, 339 medical officers who were not registered as psychiatrists or trainees, 9,779 nursing staff, and 2,720 allied health staff (social workers, psychologists, occupational therapists, and other allied health staff). Of these, 31 per cent provided ambulatory care, six per cent community residential care, and 62 per cent provided inpatient services.

Nurses are the largest group of mental health workers, comprising about 53 per cent of the mental health workforce. In 1996, a total of 9,428 registered nurses and 1,820 enrolled nurses were employed as clinicians in psychiatric/mental health facilities. However, only 6,039 of these were registered mental health nurses (33 per 100,000 population). Seventy-five per cent of these nurses worked in a capital city or other metropolitan centre, more than 14 per cent in a large rural centre, almost six per cent in a small rural centre, four per cent in other rural areas, and less than one per cent in remote areas. This distribution is less skewed than that evident for private psychiatrists.

1.8 Consumers of mental health services

A detailed profile of the consumers of mental health services by type of mental disorder has been recently obtained through the MH-CASC project. This project, one of the largest studies of mental health service utilisation ever conducted, collected information on approximately 18,000 mental health consumers. The study design involved a detailed three-month prospective data collection, covering one-quarter of specialised mental health services in both the public and private sectors.

Sociodemographic profile

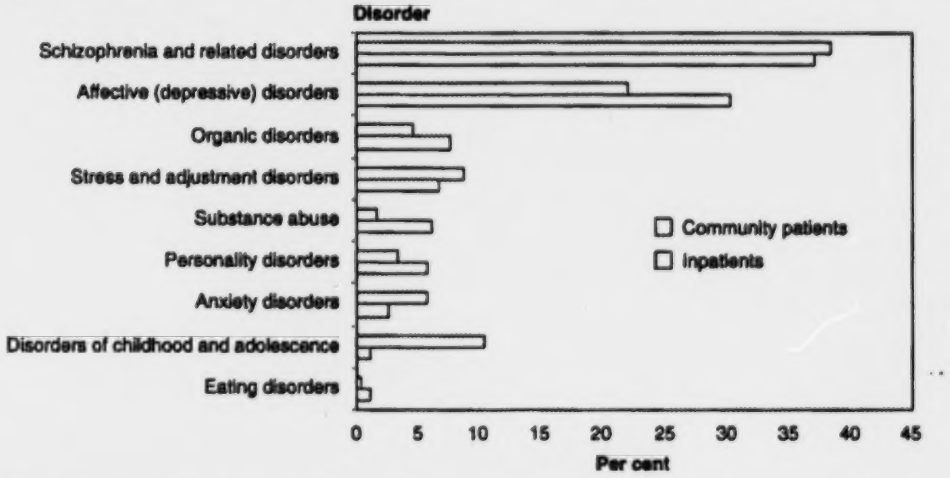
The sociodemographic profile of mental health services clients differs significantly, particularly in its socioeconomic component, from that obtained for consumers of other types of health services. The main features are:

- There is no overall gender difference in mental health service utilisation (a male/female ratio of 53:47). Almost 54 per cent of the consumers are in the age group 20–50 years.
- Male children and adolescents (0–19 years) use mental health services more often than female children and adolescents, but the pattern is converse for people aged 65 years and over.
- A large majority of consumers of mental health services have never been married (almost 56 per cent), while more than one-fifth (almost 22 per cent) are divorced, widowed or separated. Less than a quarter (22 per cent) are married or in de facto relationships.
- Most consumers have no dependent children (71 per cent), depend on a government income (64 per cent), and live in private housing (82 per cent).
- A large majority of consumers are born in Australia (almost 80 per cent), followed by those born in Europe (13 per cent).
- Of those born in Australia, about two per cent are of Aboriginal or Torres Strait Islander descent.

Types of mental disorders and service utilisation

According to MH-CASC, the main types of disorders for which people receive treatment from mental health services are schizophrenia and related psychotic disorders, and mood disorders (Figure 1.4). These disorders account for more than 67 per cent of persons treated in inpatient settings and 60 per cent treated in community settings. Although schizophrenia has a much lower prevalence in the population in comparison to other mental disorders (Kessler et al 1994), people suffering from schizophrenia and related disorders utilise almost 40 per cent of all mental health services. Mood disorders account for more than 30 per cent of the services utilised (DHFS 1998)

Figure 1.4: Proportion of people with selected mental disorders (principal diagnosis) treated by mental health services, by patient status



Source: Mental Health Classification and Services Costs Project (DHFS 1998).

A significant difference is also noted between the distributions of mental disorders treated by mental health services in inpatient and community care settings. While the proportions of services utilised for the treatment of schizophrenia and related disorders are roughly similar in the two settings, the proportion of those treated as inpatients is much higher for mood disorders.

The degree to which the MH-CASC estimates are extendable to the population as a whole is unknown, as comparable data are not yet collected routinely on a national basis. The 1997 SMHWB sample did not allow sufficient persons with schizophrenia to be identified to permit such a comparison a separate survey of low prevalence disorders is under way.

Types of mental disorders and hospitalisation

Another profile of the consumers of mental health care may be obtained from data on episode-based hospital separations as shown in Table 1.2. As a principal diagnosis, mental disorders (ICD-9 codes: 290–319)[2] were the reason for over

[2] The hospital admissions are currently coded using the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM).

200,000 hospital separations (both public and private hospitals combined) at a rate of 12.4 per 1,000 persons in 1996–97. Persons diagnosed with major depressive disorder or schizophrenic disorders accounted for the largest proportion of hospital separations for mental disorders (17.5 per cent and 14.5 per cent, respectively). Anxiety states and obsessive-compulsive disorders accounted for another 9.9 per cent of separations.

Table 1.2: Hospital separations for mental disorders and self-harm, 1996–97

ICD-9-CM codes	Principal diagnosis	Number of separations	Per cent of all mental disorders	Separations per 1,000 population[a]
Mental disorders				
306–310, 312–316	Other non-psychotic mental disorders	36,177	17.7	2.0
296.2–296.3	Major depressive disorder	35,928	17.5	2.0
295	Schizophrenic disorders	29,695	14.5	1.6
300	Neurotic disorders	20,332	9.9	1.1
291–294	Other organic psychotic conditions [b]	14,799	7.2	0.8
296	Other affective psychoses [c]	14,602	7.1	0.8
303	Alcohol dependence syndrome	13,785	6.7	0.7
290, 294.1, 331.0	Dementia	7,681	3.8	0.4
301	Personality disorders	7,387	3.6	0.4
311	Depressive disorder, nec	6,884	3.4	0.4
304	Drug dependence	5,845	2.9	0.3
305	Non-dependent drug use disorder	5,721	2.8	0.3
298–299	Other psychoses	3,992	1.9	0.2
297	Paranoid states	1,715	0.8	0.1
302	Sexual deviations and disorders	225	0.1	< 0.1
Total mental disorders		***204,768***	***100.00***	***11.2***
Self-harm				
E950–E959	Suicide and self-inflicted injury	19,499	..	1.2
All stated conditions		224,267	..	12.4

Notes: (a) Mid-year population, December 1996.
(b) Excludes dementia in conditions classified elsewhere (294.1).
(c) Excludes major depressive disorder (296.2–296.3).

Source: AIHW, National Hospital Morbidity Database.

These hospital separations accounted for more than three million patient days in 1996–97 (AIHW 1998a). Patients with mental disorders were responsible for a high use of beds (134 patient days per 1,000 population) and a long average length of stay (21 days, excluding same day separations) in 1996–97.

The average length of hospital stay for patients with schizophrenic disorders in large psychiatric hospitals (120 patient days) is markedly higher than that in acute psychiatric inpatient units or beds in general hospitals (36 days). Similarly, the average length of stay for patients with dementia (182 days) is longer in large psychiatric hospitals than in hospitals overall (46 days) (AIHW 1998b).

The total number of patient days for mental disorders declined by about 20 per cent between 1992–93 and 1995–96. Most of this decline was noted for the large, stand-alone psychiatric hospitals. In comparison, the number of patient days reported for co-located psychiatric units in general hospitals has increased during that period.

In addition to separations for mental disorders, almost 20,000 hospital separations occurred due to suicide and self-harm attempts (ICD-9 codes: E950–E959), accounting for over 53,000 patient days. These include people who died in hospital following the suicide attempt. These separations do not reflect the prevalence of suicide or attempted suicide and self-inflicted injury in the community (AIHW 1998a).

An analysis of 1992–93 hospitalisation statistics reveals that there are about three times more public hospital separations than expected for mental disorders among Aboriginal peoples and Torres Strait Islanders. Mental disorders accounted for almost three per cent of all hospitalisations for Aboriginal and Torres Strait Islander females and five per cent for Aboriginal and Torres Strait Islander males (ABS 1997c). These statistics are based on data only for public hospitals in Western Australia, the Northern Territory, South Australia and Queensland. The psychiatric hospitals are not included. These figures should be interpreted with caution, as Aboriginal peoples and Torres Strait Islanders are not always reliably identified in administrative data collections.

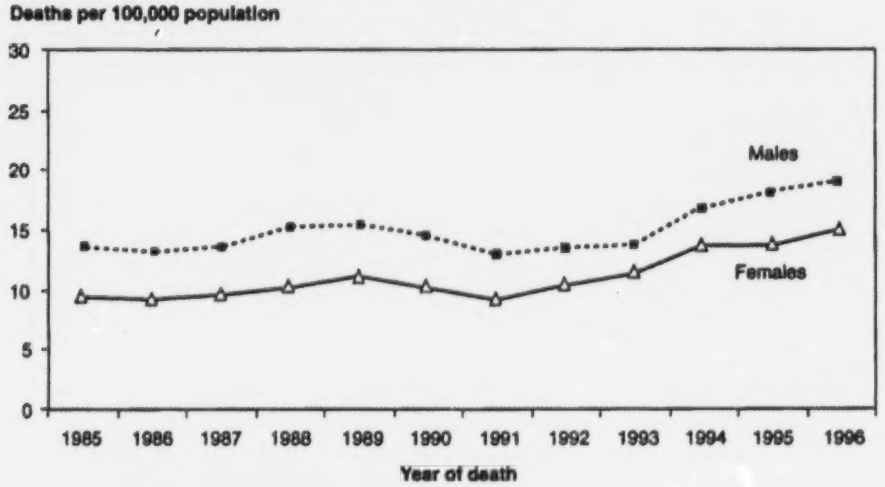
The above statistics are based on separations where a mental health problem is listed as the principal diagnosis. Information on separations where a mental disorder is a co-diagnosis rather than a principal diagnosis is not included. It is also important to mention here a major limitation of the hospital separations data in that they are episode-based rather than person-based, and therefore do not provide a direct estimate of morbidity prevalence.

1.9 Mortality

Mental disorders were cited as the primary cause of 3,560 deaths (1,495 males and 2,065 females) in Australia in 1996, representing 2.8 per cent of all deaths registered in that year. These figures do not include suicides, which are described separately in this report. The numbers are small in comparison to the high impact that mental disorders have in terms of morbidity. Nonetheless, 47,000 years of life were lost in 1996 alone due to premature mortality resulting from these disorders (Mathers 1998).

Death rates for mental disorders increased greatly between 1985 and 1996, with an average annual increase of 2.8 per cent. For males, the age-standardised rate increased from 13 deaths per 100,000 population in 1985 to 15 deaths in 1989, rising to 19 deaths in 1996 (Figure 1.5). A similar pattern is observed for females, with a corresponding gradual increase in the death rate from 9 deaths per 100,000 population in 1985 to 15 deaths per 100,000 in 1996.

Figure 1.5: Trends in death rates for mental disorders, by sex, 1985–96



Note: Mental disorders defined as ICD-9: 290–319.
Source: AIHW National Mortality Database.

This increase in death rates is largely due to a rise in mortality from senile and pre-senile psychoses (Alzheimer's disease is not included in this category). The rates for these psychoses have increased by an average of three per cent annually among males and 5.5 per cent among females. The increases were noted mostly in ages over 75 years, reflecting the age-specific nature of the disorders. No explanation can be offered at this stage for the recent increase in death rates, but varying practices in death certification and more reliable diagnoses may have contributed to this apparent increase.

Another major contributor to the increase in death rates for mental problems is use of illegal drugs. The age-standardised rate for deaths related to drug misuse increased annually by six per cent among males between 1985 and 1996. In comparison, deaths related to drug misuse in females are on the decline, by an average of 0.9 per cent per year, and are currently about one-quarter of the rate among males. Alcoholism is another large contributor to deaths categorised as being due to mental disorders.

It is estimated, based on 1992–94 mortality data for South Australia, Western Australia and the Northern Territory, that mental disorders are responsible for almost six times more deaths than expected among Aboriginal peoples and Torres Strait Islanders. A large part of this difference is accounted for by much higher death rates among Aboriginal and Torres Strait Islander males (Anderson et al 1996).

Suicide

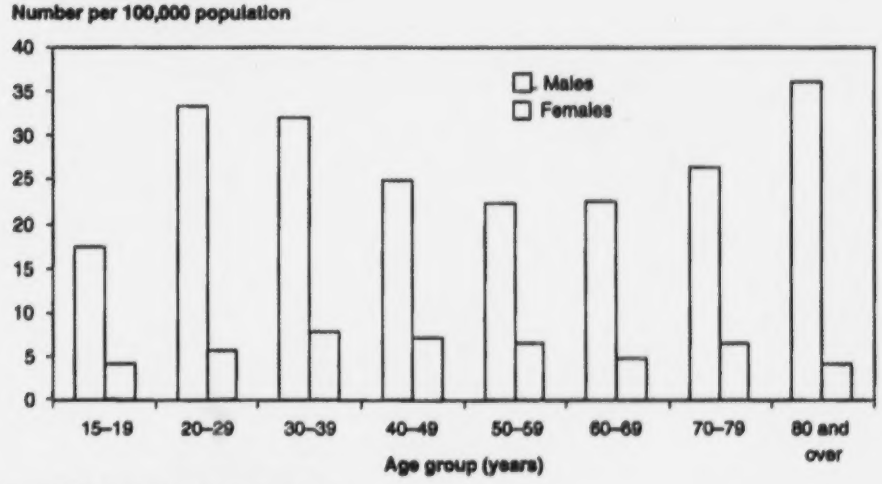
Suicide is a leading cause of death in Australia, resulting in a total of 2,393 deaths (1,931 males, 462 females) in 1996. Since 1990, suicides have exceeded road injury deaths and have been the leading cause of death due to injury in Australia (DHFS & AIHW 1998a).

Several known factors can, under certain circumstances, contribute to a person attempting suicide. Mental disorder, and specifically depression, consistently emerges as the largest single risk factor for suicide and suicidal behaviour (Patton et al 1997). It is estimated that about 88 per cent of people who died from suicide suffered from a diagnosable mental disorder at the time of their death (Henriksson et al 1993). People with a history of mental disorder are 10 times more at risk of dying from suicide compared to the general population (Gunnel & Frankel 1994).

The lifetime risk for suicide in alcoholism has been estimated to be about 3.4 per cent (Murphy & Wetzel 1990). Similarly, the lifetime risk for suicide among those diagnosed with major depressive disorder has been estimated to be about 3.5 per cent (Blair-West & Mellsop 1997). The figure for schizophrenia has also been suggested to vary between three and five per cent (Professor Robert Goldney, personal communication).

Males and females are equally at risk of attempting suicide, but there is a marked gender difference for suicide deaths, with the male suicide rate almost five times higher than the rate among females. In Australia and other western countries, the male rates are consistently higher across all age groups. Also, suicide rates for females are relatively stable across all age groups, but male suicide rates show two peaks, one in younger males and the other in the older age groups (Figure 1.6). While the rates are highest for males aged 80 years and over, the number of males in this age group is small and suicide deaths in this age group account for only a small proportion of all suicide deaths. In 1996, just over one per cent of all male suicide deaths occurred in men aged 80 years and over.

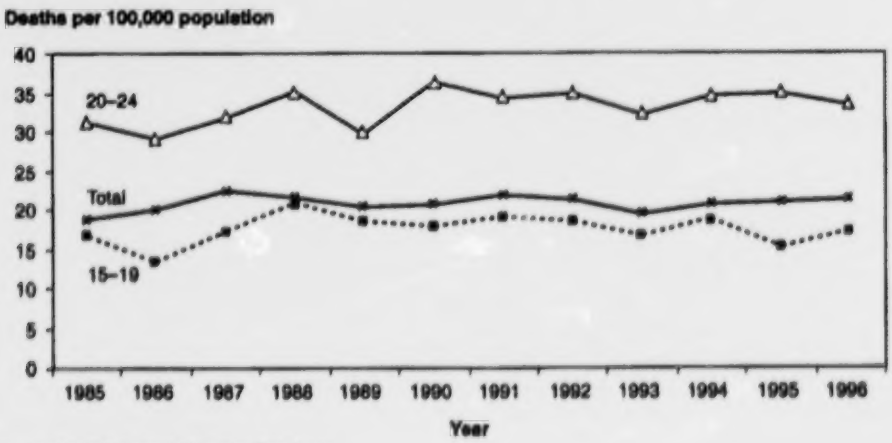
Figure 1.6: Age-specific suicide rates, by sex, 1996



Source: AIHW National Mortality Database.

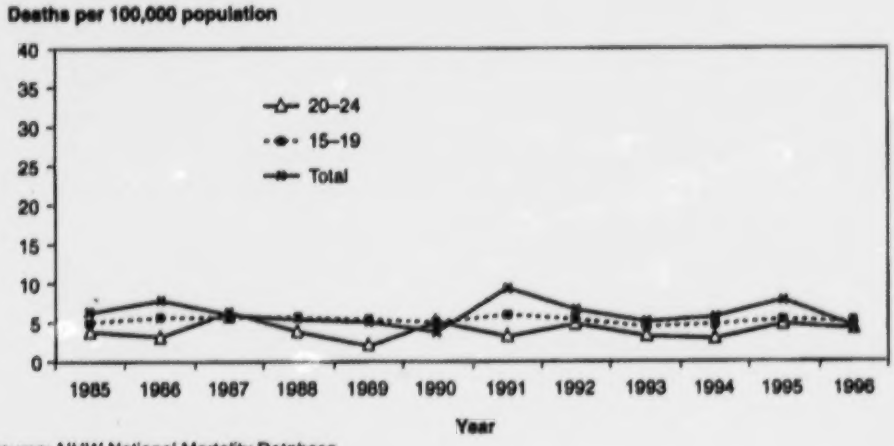
During the period 1985 to 1996, the age-standardised suicide rate increased annually by 1.2 per cent for males (Figure 1.7a), but decreased by an annual average of 0.3 per cent for females (Figure 1.7b). The greatest increases were among males aged 30–34 years (3.1 per cent), 35–39 years (4.7 per cent), and 80–84 years (3.6 per cent).

Figure 1.7a: Trends in male suicide rates, selected age groups, 1996



Source: AIHW National Mortality Database.

Figure 1.7b: Trends in female suicide rates, selected age groups, 1996



Source: AIHW National Mortality Database.

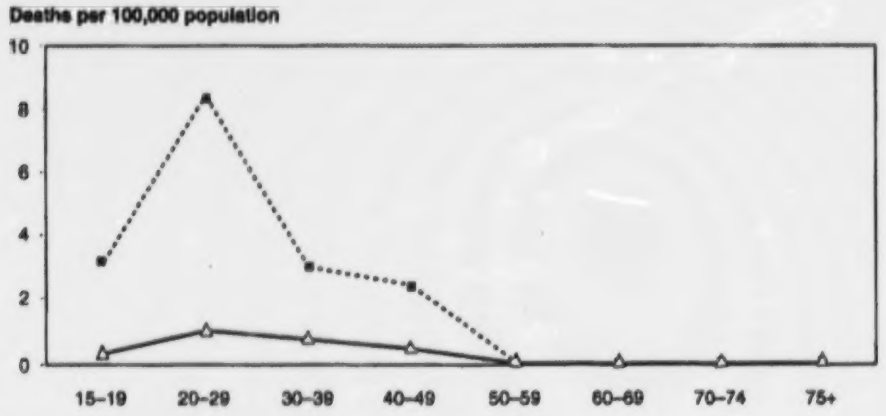
Youth suicide is a serious problem in Australia. In 1990, the suicide rate among males aged 15–24 years was about three times higher than the rate in 1960. However, the upward trend appears to have levelled off, and no further increase has been recorded since about 1990. There has been no parallel recent rise in the rate of suicide among young females (Harrison et al 1997).

Suicide rates are particularly high for males living in rural and remote communities. Using the RRMA classification (Appendix 2), Figure 1.8 shows that male suicide rates in remote area centres (with populations less than 5,000) tend to be higher than those among males living in other areas. In contrast, suicide rates for females are the highest among those living in metropolitan areas and the lowest among those living in remote areas (Strong et al 1998a).

Young males aged 15–24 years living in rural and remote areas are at an even greater risk of suicide. Dudley et al (1997) report that from 1964 to 1993, suicide rates for 15–24 year old males rose by a factor of 2.2 in metropolitan areas, four-fold in towns with populations between 4,000 and 25,000 and twelve-fold in towns with populations less than 4,000 people. While the suicide rate among young females did not change overall, the rate increased more than four-fold in towns with less than 4,000 people.

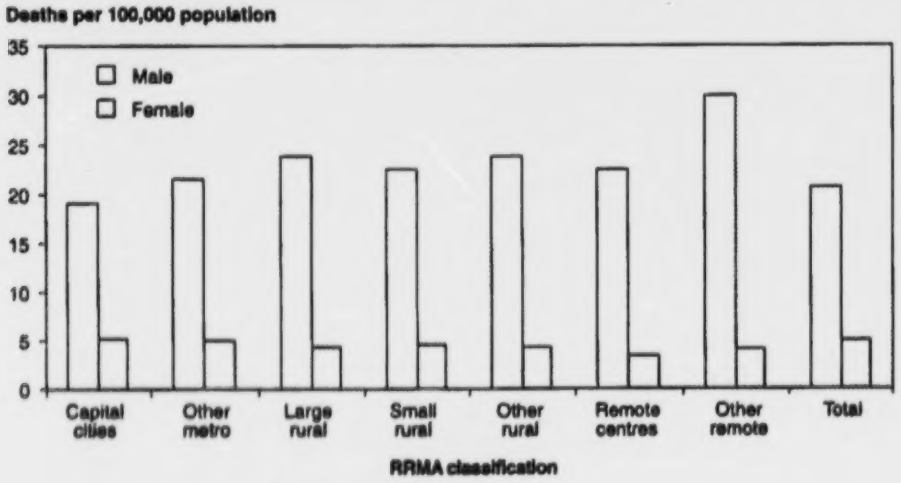
The suicide rates are also high among Aboriginal and Torres Strait Islander males. According to Anderson et al (1996), based on 1992–94 deaths data from Western Australia, South Australia and the Northern Territory, the standardised mortality ratio (SMR) for suicide between Indigenous and non-Indigenous males was 1.8. In contrast, no significant difference in suicide rates was noted between Indigenous and non-Indigenous females. The rate was particularly high among young Indigenous males, 51 per 100,000 among those aged 15–24 years, and still higher among those aged 25–34 years (66 per 100,000 persons). The suicide rate was much lower at six per 100,000 Indigenous females in the age group 15–24 years. No suicides were recorded among Indigenous females in the age group 25–34 years during 1992–94 in Western Australia, South Australia and the Northern Territory.

Figure 1.7c: Age-specific suicide rates among Aboriginal peoples and Torres Strait Islanders, 1991–96



Source: AIHW National Mortality Database.

Figure 1.8: Suicide rates in rural, remote and metropolitan areas (a) of Australia 1992–1996



(a) See Appendix 2 for details on RRMA classifications.

Note: Age-standardised to the Australian population at 30 June 1991.

Source: Strong et al (1998a).

Australia ranks in the middle of the main industrialised countries for which data were available in terms of deaths due to suicide (see Figure 1.9). In 1992, Australia ranked tenth lowest among a total of 19 developed countries (de Looper & Bhatia 1998). For suicide rates among young males aged 15–24 years, Australia ranked in the upper one-third of 45 countries compared by Harrison et al (1997).

Overseas-born suicide

There is significant diversity in the risk of suicide to immigrants. This diversity not only emanates from varying adjustments associated with settling in a new country, but is also often associated with lack of cultural support and linguistic disadvantages. Consequently, age and sex, two of the major predictors of suicide risks, reveal a range of suicide patterns among those from culturally and linguistically diverse backgrounds. Table 1.3 compares the suicide rates of the overseas-born with the Australian-born for the period 1994–96, using SMRs, for four different categories of overseas-born persons, i.e. those born in UK and Ireland; other Europe; Asia; and other Countries.

The suicide rates among males born overseas are either significantly lower than or similar to the rate noted among Australian-born males. The rate is almost one-third among males born in Asia in comparison to the rate among Australian-born. In contrast, the female suicide rates among those born overseas are either significantly higher than or similar to the rate noted among Australian-born females.

Region-wise, those born in UK, Ireland and other parts of Europe have either similar or higher suicide rates than those born in Australia. In particular, the SMRs are significantly higher among females from these regions. In contrast, those born in Asia and other countries exhibit similar or lower suicide rates in comparison to those born in Australia. In particular, the SMRs are significantly lower for males from these regions.

Table 1.3: Mortality differentials for suicide by birthplace and sex, aged 15 years and over, 1994–96

Sex	Standardised mortality ratio (SMR) by region				Total number of deaths
	UK and Ireland	Other Europe	Asia	Other	
Males	0.99	1.00	0.37*	0.81*	5,568
Females	1.21*	1.31*	0.91	1.03	1,386

* Significantly different from the expected value of 1.0 at the 5% level of probability.

Notes:

1. The standardised mortality ratio is a comparative measure of death rates among the overseas-born population relative to the Australian-born population.
2. Standardised to the Australian population at 30 June 1991.

Source: Strong et al (1998b)

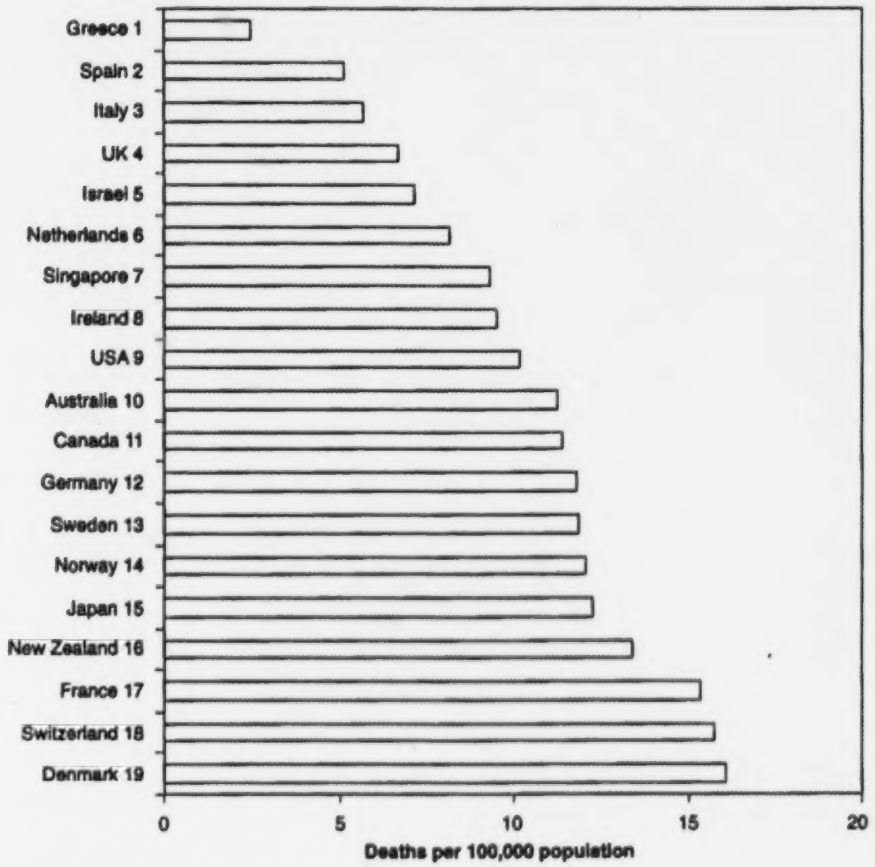
Age-specific differences in suicide rates have also been reported. Although younger immigrants of non-English speaking backgrounds experience suicide rates that are lower or similar to those for the Australian population as a whole, immigrants aged 65 years and over from these backgrounds have significantly higher suicide rates (McDonald & Steel 1997).

1.10 Comorbidity

Comorbidity, which refers to the occurrence of more than one disorder at the same time, is commonly found among people with mental disorders. Mental disorders may also contribute to the development and maintenance of several physical conditions and disabilities. Psychosocial problems constitute one of the most troublesome patient management problems for physicians caring for the medically ill. Co-existence of more than one mental health problem in the same individual is also common.

In the 1997 SMHWB, 17.7 per cent of the respondents reported having a mental disorder. Almost 43 per cent of these persons had a physical condition as well, which included heart problems, diabetes, cancer and many other conditions. In comparison, 38.8 per cent of the respondents reported the existence of a physical condition, a quarter of whom also reported a mental disorder. The probability of a person reporting both a physical condition and a mental disorder is estimated to be 6.9 per cent, significantly lower than the observed comorbidity of 7.6 per cent. Co-existence of a physical condition and a mental disorder was reported much more commonly among females than expected by chance alone. The presence of physical conditions does not seem to lead to an increase in substance use disorders.

Figure 1.9: A comparison of suicide rates in OECD countries, 1992



Note: Age-standardised to the World Standard Population.
Source: WHO (1994,1995,1996).

More than one in three of those with an anxiety disorder also had an affective disorder (defined as depression or dysthymia in this survey), while one in five also had a substance use disorder (ABS 1998). Similarly, a large proportion of those with an affective disorder also had an anxiety disorder (78.6 per cent). Although both anxiety and affective disorders are twice as common among females than males, no gender-specific increase was reported in the comorbidity of the two types of disorders.

1.11 Mental health and disability

The burden of mental disorders is more evident in associated disability than in mortality. The effects of this psychiatric disability are multidimensional. Not only is a person's full functioning compromised but their participation in day-to-day life may also be affected.

An important source of information on psychiatric disability in Australia is the ABS disability survey. Based on the 1993 Survey of Disability, Ageing and Carers conducted by the ABS, the prevalence rate for psychiatric disability has been estimated as 2.8 per cent (AIHW 1997a). For this survey, the ABS adhered to the definitions and the three dimensions of the 1980 International Classification of Impairments, Disabilities and Handicaps (ICIDH). However, the estimate from this survey may be lower than the true prevalence rate in the population. According to Madden et al (1995), the ABS disability survey screening questions may be a source of underestimation of psychiatric disability.

To cover developments since 1980, a new version of the ICIDH is being drafted. In this version, the ICIDH-2, the three re-named and re-structured dimensions are *impairment*, *activity* and *participation* to give more recognition to consequences of interaction between a person and their environment. The final version of the ICIDH-2 is planned for publication in 1999.

Additional data on disability associated with mental disorders have been generated recently through the 1997 SMHWB. The survey used the Brief Disability Questionnaire (BDQ) to investigate whether respondents were restricted in their movement because of health problems, and to what extent their capacity was limited (ABS 1998). The BDQ measures aspects of disability that are different from the ICIDH-based measures used in the Survey of Disability, Ageing and Carers. For more details on the questionnaire, see Appendix 2.

According to the 1997 SMHWB, 65.9 per cent of Australians aged 18 years and over were disability-free from mental disorders or physical conditions, as measured by the BDQ. Among those who reported a mental disorder and/or a physical condition, 12.9 per cent reported mild disability, 14.7 per cent moderate disability, and 6.5 per cent severe disability (ABS 1998). Females were more likely to report disability than males. The prevalence and severity of disability increased with age.

Among the 1997 SMHWB respondents who reported physical conditions only, 54.6 per cent were considered to have mild, moderate or severe disability, compared with 29.6 per cent among those with mental disorders only (ABS 1998). The proportion of disability was much higher among people with both a physical condition and a mental disorder (62.9 per cent).

Comorbidity has a cumulative effect on the severity of disability. Severe disability is much more common among those with a combination of both a physical condition and a mental disorder. Persons with mental disorders only reported an average of 2.2 days during which they were unable to fully carry out usual activities in the four weeks prior to the interview, compared with 4.1 days for persons with a mental disorder and a physical condition (ABS 1998).

If present in combination with a physical condition, anxiety and affective disorders have a more disabling impact than substance use disorders. More than 70 per cent of persons with anxiety disorders reported disability in 1997 SMHWB (ABS 1998). The proportion is slightly lower among those with affective disorders and physical condition(s) at 65 per cent. However, the severe end of the disability spectrum is much more evident among persons with affective disorders.

Disability support

A variety of services and assistance is available to people with a disability. These include disability-specific income support, disability support services and other generic services, some of which contain components targeted specifically at people with a disability. The MH-CASC study has estimated that about 31 per cent of those treated by mental health services received the disability support pension in 1995–96; a further 33 per cent of patients received some other form of pension such as repatriation, unemployment, aged, sickness benefit or other (DHFS 1998).

According to the Commonwealth Department of Social Security (DSS) estimates, 546,485 pensions were paid in the first quarter of 1998 under the Disability Support Pension Scheme. Of these pensions provided to people with an inability to work, nine per cent were paid for intellectual/learning conditions and 18 per cent for psychological/psychiatric conditions, as defined by the DSS. It should be noted that these estimates exclude other disability-related pensions such as age pensions and the veterans' disabili[illegible]s (DSS 1998).

People with psychiatric disab[illegible]y, however, have more specific needs than those with non-psychiatric disability. In 1997, psychiatric disability was the primary disability for almost six per cent of clients receiving services under the Commonwealth/State Disability Agreement (CSDA). Under the CSDA, the prime target group is the age group 0–64 years; however, a significant number of people over the age of 64 remain, due to their ongoing needs, service recipients as they age within the service (AIHW 1997). A large proportion of CSDA clients had an intellectual disability as their primary disability (67.3 per cent). This proportion was consistent for both sexes (Black & Maples 1999).

1.12 Costs of mental disorders

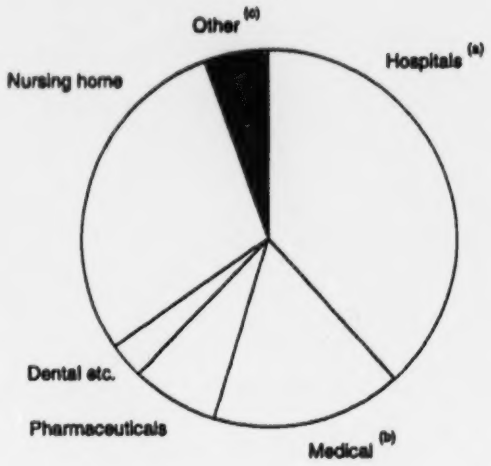
Mental disorders are estimated to be the fourth most expensive disease group, after digestive system diseases, circulatory disorders and musculoskeletal problems. High cost is partly a consequence of long-term chronic conditions with relatively low fatality rates.

The institutional and non-institutional costs of mental disorders in Australia have been estimated at $2.58 billion in 1993–94 alone, if calculated at the broad ICD-9 disease group level. This constitutes 8.3 per cent of the total health system costs that year. Intentional self-inflicted injuries cost a further $69 million (Mathers & Penm 1999).

Hospitals and nursing homes account for almost 64 per cent of all mental disorder treatment costs (Figure 1.10). It should be noted that the burden of mental disorders to the Australian community is much more than these costs, as costs relating to absenteeism, lost productivity, the burden on carers and family, legal costs, and lost quality and years of life are not included.

Figure 1.10: Health system costs for mental disorders, 1993–94

Health sector	($ million)
Hospital [a]	929.4
Outpatients	78.0
Medical [b]	432.1
Pharmaceuticals	198.3
Dental etc.	83.3
Nursing homes	717.7
Other [c]	146.5
Total	2,585.4



(a) Public and private acute hospitals, repatriation hospitals and psychiatric hospitals.

(b) Medical services for private patients in hospitals is included under 'hospitals'.

(c) Includes research and other institutional, non-institutional and administrative expenditure. Does not include other public health services, community health services, ambulances, or medical aids and appliances.

Source: Mathers & Penm et al (1998).

The costs are much higher for dementia, depression and schizophrenia than for other mental health problems. Table 1.4 also illustrates that the proportional contribution to the total costs from different types of services, such as general practitioners, specialists or pharmaceuticals, varies considerably for different mental health problems (Mathers & Penm 1999).

Table 1.4: Health system costs for specific mental health problems by health sector and ICD-9 chapter, 1993–94

ICD-9 Chapter	Hospital inpatients		Non-inpatients	Total hospital	Nursing homes	Medical services			Pharmaceutical		Allied professionals	Research	Other	Total direct
	Public	Private				GPs	Specialists	Total	Prescribed	Over counter				
Dementia	87.2	11.3	0.0	98.5	454.7	3.2	2.4	5.5	0.9	0.1	0.8	8.4	25.3	594.1
Non-drug psychoses	382.4	21.4	6.1	409.9	81.7	9.6	25.1	34.7	10.9	0.8	2.4	8.1	24.4	572.7
Schizophrenia	265.8	8.9	4.9	279.6	19.6	7.7	18.8	26.5	7.6	0.5	1.2	5.0	15.1	355.1
Bipolar disorder	24.9	6.3	0.4	31.6	12.6	0.5	1.8	2.3	1.5	0.1	0.4	0.7	2.2	51.4
Other	91.7	6.3	0.7	98.7	49.6	1.4	4.5	5.9	1.8	0.1	0.8	2.4	7.1	166.2
Depression	113.7	36.8	12.1	162.6	87.1	36.6	103.2	139.9	60.6	4.8	12.4	7.0	21.1	495.4
Major depression	83.1	21.6	1.1	105.8	40.9	1.5	4.7	6.1	4.1	0.2	1.1	2.4	7.1	167.7
Reactive depression	30.6	15.2	10.9	56.7	46.3	35.2	98.6	133.7	56.5	4.6	11.3	4.6	13.9	327.7
Reaction to stress/adjustment	14.4	7.6	17.4	39.4	5.7	12.7	14.9	27.6	4.5	22.0	7.3	1.7	5.1	113.2
Neurotic disorders	16.3	8.0	13.0	37.4	11.3	44.6	59.6	104.2	40.0	0.8	13.5	3.1	9.3	219.7
Personality disorders	21.6	2.1	1.7	25.4	5.3	1.4	6.1	7.5	0.5	0.0	1.7	0.6	1.8	43.0
Alcohol problems	95.4	13.4	4.1	112.9	27.4	6.0	13.5	19.4	2.1	0.2	4.9	2.5	7.5	177.1
Alcoholic psychosis	44.0	0.6	0.5	45.1	17.2	1.0	2.0	3.0	0.4	0.0	0.8	1.0	3.0	70.4
Alcohol dependence/abuse	51.4	12.8	3.6	67.8	10.2	5.0	11.4	16.5	1.8	0.2	4.1	1.5	4.5	106.7
Tobacco abuse	0.1	0.0	1.0	1.1	–	3.6	3.0	6.6	0.2	0.1	0.8	0.1	0.4	9.3
Drug problems	22.3	4.9	5.2	32.4	8.0	8.3	4.1	12.3	6.8	0.3	8.3	1.0	3.1	72.3
Drug psychoses	7.6	0.3	2.2	10.1	6.9	3.4	1.7	5.1	2.8	0.1	3.6	0.4	1.3	30.4
Drug dependence/abuse	14.7	4.6	3.0	22.2	1.2	4.9	2.3	7.2	4.0	0.2	4.7	0.6	1.8	41.9
Mental retardation	16.2	0.2	–	16.4	3.1	0.9	0.5	1.3	0.4	0.1	–	0.3	1.0	22.6
Other mental disorders	38.8	9.1	8.9	56.8	33.2	34.6	36.8	71.3	40.7	0.8	31.1	3.5	10.6	248.0
Prevention & screening	0.0	0.0	8.5	8.5	–	0.1	1.5	1.6	–	0.8	–	0.2	0.5	11.6
Total	**814.5**	**114.9**	**76.0**	**1,007.5**	**717.7**	**161.5**	**270.6**	**432.1**	**167.6**	**30.7**	**83.3**	**36.6**	**110.0**	**2,585.4**

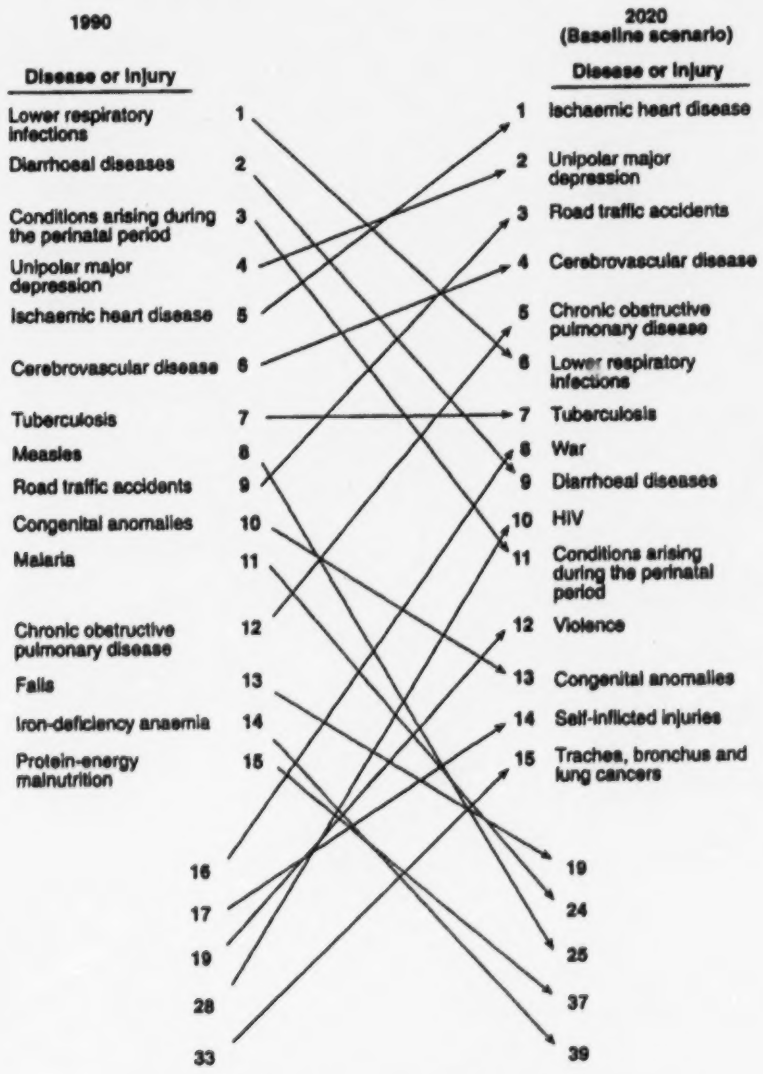
Note: The above numbers are given as $ million.
Source: Mathers & Penm (1999).

1.13 Depression as a focus area

The World Bank and the WHO have predicted that by the year 2020, the health burden attributable to neuropsychiatric disorders could increase by about 50 per cent, from 10.5 per cent of the total burden in 1990 to almost 15 per cent in 2020. Projections to the year 2020 indicate that depression will contribute the largest share to the burden of disease in the developing world and the second largest worldwide. The economic costs of this increase are likely to be high (Murray & Lopez 1996).

Figure 1.11 reveals the substantial health burden of depression in comparison to other diseases and its upward trend. The sum of the burden of unipolar major depression and suicide has been estimated at 5.1 per cent of total disease burden, making it the fourth most important cause of global burden in 1990.

Figure 1.11 Change in the rank order of disease burden for 15 leading causes, world, 1990–2020



Disease burden measured in Disability-Adjusted Life Years (DALYs)

Source: Murray & Lopez (1996).

In view of these projections, the NHPC selected depression for focused attention under its initiatives in relation to the priority area of mental health in this round of reporting. Depression is also a major focus of the Second National Mental Health Plan, which includes the development of a proposed three-year National Depression Action Plan.

Efforts to improve mental health and reduce the impact of mental disorders are undergoing a process of significant reform in Australia. Under the National Mental Health Strategy, launched in 1992, there have been major changes to the public mental health services that are now extending into the private sector. The strategy has been recently renewed for a further five years.

The Second National Mental Health Plan will advance the new strategy. The plan identifies three broad areas for action including a stronger focus on:

- mental health promotion, prevention and early intervention;
- ensuring better partnerships within mental heath services, and between mental health services and other health services, consumers, families and other sectors; and
- improving the quality and effectiveness of mental health services.

2 Profile of depression in Australia

This chapter gives a profile of depression in Australia. The major systems used to diagnose depression are described and definitions for the terms used throughout the report to refer to disorders are presented. Disorders that are strongly associated with depression and the links between depression and the other NHPA are also covered. The course of depression across the lifespan is outlined along with risk and protective factors, including those that are more common to specific population groups. The impact of depression on the community is considered before concluding with an examination of depression research in Australia.

2.1 Definitions and diagnosis of depression

The term depression is used in many different ways: to describe transient states of low mood experienced by all people at some time in their life through to severe psychiatric disorders. Depression is understood to be a condition that generally comes and goes, that is more likely at certain stages of the life cycle, and with some types driven by genetic and biological factors and other types being more a response to major life events.

The clinical diagnosis of depression is made on the basis of the existence of a collection of signs and symptoms, also called a syndrome. Currently, the most widely used classification systems for depressive disorders are the *Diagnostic and Statistical Manual of Mental Disorders, fourth edition* (DSM-IV) (APA 1994) and the *International Classification of Diseases, tenth edition* (ICD-10) (WHO 1992), which has replaced ICD-9. The DSM-IV system underpins much clinical practice in Australia and is both a dimensional and categorical subtyping system. It allows a continuum of severity, but also includes three major depression subtypes:

- mild, moderate or severe major depression without psychotic symptoms;
- severe major depression with psychotic symptoms; and
- melancholia.

The ICD-10 system forms the basis of much research and international comparisons. It subdivides depression along a severity continuum into:

- mild;
- moderate; and
- severe, with or without psychotic features.

Depressive symptoms can be measured in the community and in research populations by a number of self-report inventories and checklists such as the Beck Depression Inventory (Beck & Steer 1987), the Centre for Epidemiologic Studies Depression Scale (Radloff 1977), and the Self-Rating Depression Scale (Zung 1965). Specialised scales are available for measuring depressive symptoms in children (eg Children's Depression Scale, Lang & Tisher 1983) and older adults (eg Geriatric Depression Scale, Yesavage et al 1983).

To ensure clarity and consistency throughout the report, the following definitions of depression have been adopted. While these definitions generally reflect current clinical and research practice, they are not prescriptive. Clinical diagnostic systems such as the DSM-IV and ICD-10 provide more detail regarding appropriate diagnoses and definitions of disorders.

A *depressed mood* is ubiquitous, common, and generally lasts minutes to days. The individual feels 'down', hopeless, helpless, pessimistic, self-critical, and has lowered self-esteem. Such moods may be quite severe, but by themselves are generally brief.

DSM-IV *depressive symptoms* are listed in Box 2.1, and represent a reasonable list of common features. People may have depressive symptoms but not meet the criteria for one of the depressive disorders, where certain numbers of symptoms are stipulated. An 'intermediate' condition between depressed mood states and depressive disorders and where there is the presence of depressive symptoms, has been termed subsyndromal or subclinical depression.

Recent studies have shown that the presence of depressive symptoms may predict and follow episodes of major depression, continue between episodes, and form a spectrum of depressive psychopathology (Judd et al 1997). When depressive symptoms are included in depression prevalence studies, rates are not only high, but depression patterns appear also to be more chronic. Depressive symptoms are also associated with an increased risk for suicide attempts (Howarth et al 1992).

Box 2.1: DSM-IV major depressive symptoms

1. *Depressed mood most of the day.*
2. *Loss of interest or pleasure (in all or most activities, most of the day).*
3. *Large increases or decreases in appetite (significant weight loss or gain).*
4. *Insomnia or excessive sleeping (hypersomnia).*
5. *Restlessness as evident by hand wringing and similar other activities (psychomotor agitation) or slowness of movement (psychomotor retardation).*
6. *Fatigue or loss of energy.*
7. *Feelings of worthlessness, or excessive or inappropriate guilt.*
8. *Diminished ability to concentrate or indecisiveness.*
9. *Recurrent thoughts of death or suicide.*

A *major depressive disorder* is characterised by episodes of more persistent and pervasive disturbances in mood and accompanying features. It is formally diagnosed by the presence of at least five out of the nine symptoms listed in Box 2.1, including depressed mood and loss of interest or pleasure for most of the time over the past two weeks. Over time, the person may also withdraw from social contact and show impairment in performing usual social roles.

Major depressive disorder is generally categorised into *bipolar* and *unipolar* subtypes, a distinction based on the different courses of the disorders and indicating differing approaches to treatment.

A *bipolar disorder* typically involves a longitudinal pattern of manic or hypomanic episodes, usually interspersed with depressive states. Manic episodes are hedonic states, with the individual exhibiting confidence, optimism, grandiosity, increased energy, talkativeness, increased libido, and being drawn to pleasurable activities. Hypomanic symptoms show an above-normal elevation of mood that is not as extreme as mania. Such states can also be accompanied by psychotic symptoms, such as delusions and hallucinations, where the person is seriously out of contact with reality.

Unipolar disorders represent a larger residual group of disorders where an individual experiences depressive episodes only. A group of Australian researchers (Parker & Hadzi-Pavlovic 1996) has produced findings that support clinical distinction between two depressive subtypes:

1. *melancholic*, or *endogenous, depression* is associated with specific clinical features, particularly disturbance of psychomotor function. Although melancholic depression is rare in the community, it is an important condition in specialist treatment settings, as it responds best to physical treatments such as antidepressant drugs and electroconvulsive therapy; and

2. a *residual*, quite heterogeneous group of disorders, including 'reactive depression', 'adjustment disorder with depressed mood', and depressions secondary to anxiety and personality style. It also includes DSM-IV disorders such as *dysthymia* and *cyclothymia*. Both of the latter are characterised by either fewer depressive symptoms, or less severe expression of depressive symptoms, than the major depressive disorders, but the symptoms are persistent, lasting two or more years.

Postnatal depression describes the expression of depression associated with childbirth and post-partum mood disorder. These include brief episodes of depressed mood, major depressive disorder, and post-partum psychosis in which psychotic symptoms are also present.

Other disorders discussed throughout the report that require clarification are:

Affective disorders, or *mood disorders*, are terms that can be used to describe all those disorders that are characterised by mood disturbance. Disturbances can be in the direction of elevated expansive emotional state or, in the opposite direction, a depressed emotional state.

Seasonal affective disorder is a subtype of mood disorder where there is a seasonal pattern of mood variation. There is a regular pattern of onset and remission of depressive symptoms and episodes, which usually have onset in autumn/winter and remission in spring/summer. The symptoms of seasonal affective disorder are atypical of depression, often comprising hypersomnia, carbohydrate craving, as well as increased appetite and weight gain.

Anxiety is an unpleasant feeling of fear and apprehension accompanied by increased physiological arousal. *Anxiety disorders* are those in which fear or tension is the primary disturbance, and include *phobic disorders*, *panic disorder*, *generalised anxiety disorder*, *obsessive disorder* and *post-traumatic stress disorder*.

2.2 Risk and protective factors

The aetiology of depression is complex and multifactorial and requires a biopsychosocial model that takes into account the interaction of many diverse factors. Biochemical changes in the brain give rise to the major symptoms of depression (Nemeroff 1998), while the precipitants of these changes are often psychosocial. Genetic factors increase vulnerability to depression, but the specific genes involved are not known.

It is difficult for research to determine what risk and protective factors are paramount, because depression appears to be affected by such a wide variety of factors, from those at the biological level of the individual to social structural factors such as unemployment and low socioeconomic status. For many risk and protective factors, supporting research evidence is lacking or unclear. The experience of multiple risk factors may also greatly increase vulnerability, and, as a consequence, it is thought that specific population groups, such as refugees and Aboriginal peoples, are at increased risk of depression; however, supporting research evidence is needed. The following text, while not a review of risk and protective factors, presents some of the factors widely held to be important. Box 2.2 summarises the main risk and protective factors.

Box 2.2: Summary of risk and protective factors associated with depression

Risk factors	Protective factors
Environmental and social	
Social disadvantage (eg poverty, unemployment)	*Good interpersonal relationships (eg supportive relationship with at least one person/parent, perceived social support)*
Family discord (eg relationship break-up, conflict, poor parenting practices)	*Family cohesion (eg positive parent-child relations)*
Parental mental illness	*Social connectedness*
Child abuse (eg physical and sexual abuse, neglect)	*Academic/sporting achievements*
Exposure to adverse life events (eg bereavements, family separation, trauma, family illness)	
Caring for someone with a chronic physical or mental disorder	
For older adults, being in residential care	
Biological and psychological	
Parental mental disorder and family history of depression	*Easy-going temperament*
Being a female adolescent	*Optimistic thought patterns*
High trait anxiety and pre-existing anxiety disorders, substance misuse, conduct disorder	*Effective coping skills repertoire (eg social skills, problem-solving skills)*
Temperament—reacting negatively to stressors, and personality trait of neuroticism	
Negative thought patterns (pessimism, learned helplessness)	
Avoidant coping style	

Adverse environmental influences that may increase vulnerability to depression across the lifespan include recent life events and experiences of loss and failure such as: bereavement; relationship break-up; school failure; social isolation; lack of social connectedness or sense of community ties; socioeconomic factors such as poverty and unemployment (particularly long-term unemployment) (Winefield 1995; Rutter 1985, 1987; Schofield & Bloch 1998) and caring for a person with chronic physical or mental disorder. Negative thoughts and evaluations of the self are considered to be significant psychological factors that trigger depression (Beck 1967). Lack of effective coping responses to life's problems is also likely to contribute to the onset of depressive disorder, particularly if the preferred coping style is to avoid problem solving and reinforces feelings of helplessness and failure (Folkman et al 1986, Peterson et al 1993).

Protective factors across the lifespan include having an easy-going temperament and good perceived social support, especially having a relationship with a supportive adult (Werner 1992). A coping style that favours problem solving is also protective (Folkman et al 1986).

Major risk factors contributing to vulnerability in childhood, as well as later in life, include one or both parents suffering from depression (particularly the mother), the loss of a caring parent, physical abuse, neglect, and sexual abuse (Perry et al 1995, NHMRC 1997). For disorders in childhood, family influence is paramount. Poor parenting practices (such as a cold, controlling and affectionless parenting style), severe marital discord, divorce, and other family disruptions are potential risk factors (Rey 1995). Parenting is usually conceptualised as a two-fold process, involving contributions from both parent and child. Although it had previously been mainly viewed as a complex environmental factor, Kendler's (1996) large multi-generational study of female twins has provided more evidence that genetic factors in both parent and child contribute to parenting style and interactions, at least in females. Behavioural problems in childhood are also a known risk factor for depression (Angold & Costello 1993). The negative effects of loss or abuse in childhood can be mitigated, however, by experiences of academic or sporting achievement in adolescence, as well as by a supportive relationship outside the home and good interpersonal relationships (Rutter 1985, 1987; Luthar & Ziegler 1991).

Risk and protective factors in adolescence have been reviewed to produce the *NHMRC Clinical Guidelines for Depression in Young People* (NHMRC 1997). Confirmed risk factors for depression in adolescence are symptoms of anxiety, conduct disorder or substance use disorder; being female; being an older adolescent; having a depressed parent; and having a previous history of depressive disorder or symptoms. Probable risk factors are having a close biological relative with depression and exposure to stressful life events. Possible risk factors that need further investigation are: poor self-esteem or vulnerability because of negative thinking; neuroticism or vulnerable personality; parental divorce or conflict; uncaring or over-controlling parental style in childhood; early childhood physical or sexual abuse; being of Aboriginal or Torres Strait Islander descent[3]; residing in rural areas; having sleep dysfunction; low socioeconomic status; poor peer relationships; decreasing school performance; having co-existing medical problems; being homeless or in custody; having learning difficulties; prior history of suicide attempt; being a refugee; hormonal changes during puberty; and parental

[3] According to the *Bringing them Home* (1996) report, family separation policies have caused Aboriginal and Torres Strait Islander parenting skills to be undermined, leading directly to risks for children and future generations.

death. Possible protective factors needing further investigation are good peer relationships, good relationships with parents, and being employed. In families where a parent has a depressive disorder, resilience in adolescence is associated with having a good understanding of the parent's illness, good interpersonal relationships, and a strong sense of self (Beardslee & Podorefsky 1988).

For adults, having a temperamental style with a propensity to react negatively to environmental stressors is a major risk factor for depression (Rutter 1997). Negative thought patterns, such as learned pessimism or helplessness, are further risk factors, while an optimistic thought pattern is likely to be a protective trait (Peterson et al 1993, Seligman 1975). For older adults, factors associated with being placed in residential care contribute to the development of depressive disorder (Ames 1993).

2.3 Depression and related disorders

Depressive disorder is associated with high rates of comorbidity (ABS 1998; Kessler et al 1994, 1996). When depression occurs with another disorder, it is likely to cause more disability than when it occurs alone (Sartorius et al 1996). The frequent occurrence of mixed patterns of disorder is important for recognition and management in primary care and other settings.

Depression and anxiety disorders

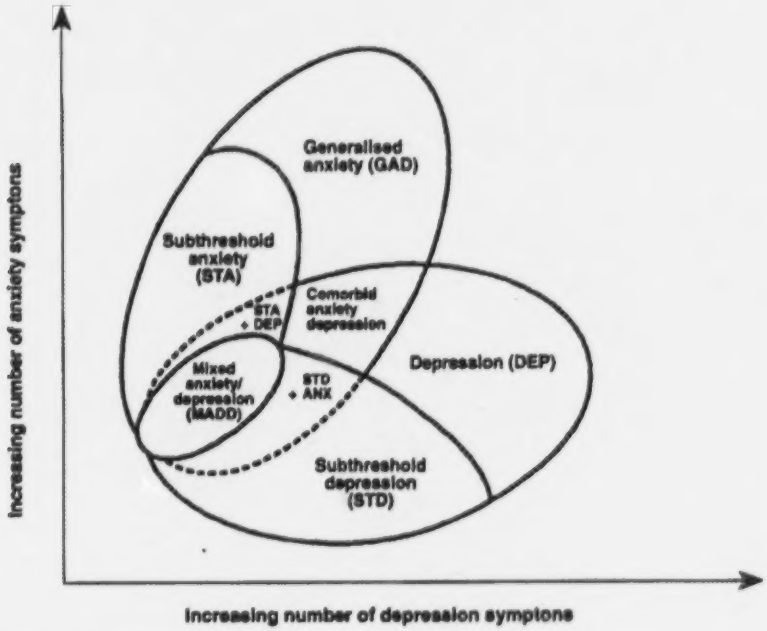
Depression is more likely to be associated with anxiety than any other disorder. Just over half the people with an affective disorder or depressive disorder also reported an anxiety disorder in the 1997 SMHWB. The comorbidity of depression and anxiety is evident in both primary care and specialised mental health settings.

In an Australian primary care study, it has been found that 36 per cent of those attending primary care settings have symptoms of psychological disorder and 20.5 per cent report both anxiety and depressive disorders (Harris et al 1996). Figure 2.1 shows that comorbidity between major depressive disorder and anxiety occurs in nearly half the people with an affective disorder, as determined by a WHO study of primary care at 15 diverse international sites (Sartorius et al 1996). Symptoms of both depression and anxiety are found in nine per cent of those who, even though they were below the threshold of symptoms to meet diagnostic criteria, nevertheless, had clinically significant symptoms and functional impairment (Harris et al 1996).

When the comorbidity of anxiety and depression is examined in greater depth, as in the US National Comorbidity Study (Kessler et al 1996), it is found that anxiety disorders frequently precedes major depressive disorder and the co-occurrence of both is common. The occurrence of an anxiety disorder also predicts subsequent risk of a major depressive disorder. The authors suggest that reported increases in the prevalence of depression may be attributable to increases in depression that is secondary to an anxiety disorder, and that such depressive disorders are likely to be more severe.

Local studies confirms these international findings, both for the general community (Parker et al 1997b) and for people being treated in a hospital setting for depression (Parker et al 1998). These studies indicate that a first episode of

Figure 2.1: Comorbidity of depression and anxiety in primary care



Source: Satorius et al (1996).

unipolar major depressive disorder is more likely in people who have a primary anxiety disorder, with generalised anxiety disorder, panic disorder and social phobia being the most likely pre-existing conditions. A pre-existing anxiety disorder also increases the likelihood of longer and more frequent episodes of depression. The finding that certain expressions of anxiety increase the chance of depression occurring and also prolong episodes suggests a key point of intervention and treatment—specifically, persons with a pre-existing anxiety condition may benefit more from having the anxiety treated than by treating only the depressive disorder.

Depression and health-related risk behaviour

While depression is more likely to co-occur with anxiety disorders, it might also do so with a range of health risk behaviours (Sartorius et al 1996). Depression has links with health risk states which include tobacco use, illicit drug use, alcohol misuse and dependence, eating disorder and obesity.

Smoking has been shown in a number of epidemiological studies to be associated with either depressive symptoms or mixed anxiety and depression. One longitudinal study reports that adolescent depression may predict subsequent smoking in adulthood (Kandel & Davies 1986) and an Australian study has shown an association between smoking and both depression and anxiety in teenagers (Patton et al 1996b, Patton et al 1998). Furthermore, depressed smokers are less likely to give up smoking than those who are not depressed and may have taken up smoking to self-medicate their depressive symptoms (Anda et al 1990). While causation is not established, there are a number of common risk factors for both

depression and smoking, including alcohol use, the personality trait of neuroticism, exposure to adversity, and socioeconomic disadvantage (Jorm et al 1999b).

The 1997 SMHWB found that nearly one in four people who had an affective or depressive disorder also had a related substance use disorder. However, the likelihood of depression being comorbid with alcohol dependence was half the likelihood of it being comorbid with anxiety. There is accumulating evidence that depression predicts progression to both alcohol misuse and dependence in younger drinkers (Nelson et al 1996). Similarly, in dieters, it predicts the development of symptoms of bulimia nervosa (Patton et al 1999).

Depression and physical illness

Depression is also common in people with physical illnesses. The 1997 SMHWB found that nearly half the people who had an affective or depressive disorder also had a related physical problem. Conversely, for people with physical disorders the prevalence of depression may also be as high as 50 per cent (Lamberg 1996). Depression is a contributing factor particularly for people contacting medical services with symptoms of pain and fatigue, especially chronic fatigue (Simon & von Korff 1991, Hickie et al 1996).

Suffering from depression also may affect physical health; several types of immune dysfunctions have been reported in people suffering from depressive disorder (Seidel et al 1996).

The diagnosis of depression in people who are physically ill is not always evident. The indicators of depressed mood, such as loss of interest and fatigue, may be attributable to the physical condition or to current medications. This leads to difficulty in recognising depression or, alternatively, to over-identification of depression when the symptoms are linked to the physical illness.

Depression and other National Health Priority Areas

Cardiovascular health

A recent review highlights the considerable prevalence of depression in people diagnosed with cardiovascular disease, with rates ranging from 10–23 per cent for major depressive disorder (Musselman et al 1998). Depression has also been shown to predict future cardiac events in people with coronary artery disease. A study of persons treated for depression showed that these individuals are 2.3 times more likely to have a heart attack. Although the risk is also increased for smokers and those with high cholesterol, it was concluded that depression was the biggest contributor to heart attacks (Cohen 1997). Depression increases cardiovascular risk through a number of mechanisms that are both physical (such as autonomic dysregulation and platelet dysfunctioning promoting thrombosis) and psychological in nature (such as non-compliance with the treatment regime) (Shapiro et al 1997).

Depression also impacts negatively on survival following a cardiac event, and hastens mortality in the ensuing 18 months. A study examining the 18 months post myocardial infarct survival has found that people who are depressed have an almost fourfold risk of death compared to those not depressed (Frassure-Smith & Lesperance 1995). Depression has also, in prospective epidemiological studies and a large clinical study, been shown to independently predict mortality from cardiovascular disease (Musselman et al 1998).

If unrecognised and untreated, depression is known to adversely affect compliance with prescribed exercise therapy, as well as rehabilitation and recovery, in people recovering from myocardial infarction. Antidepressant medication, specifically selective serotonin reuptake inhibitors (SSRIs) (see Table 4.1), may play a role in treating depression in this population while also reducing the risk of thrombosis (Shapiro et al 1997).

Diabetes

There are relatively few recent studies examining the prevalence of depression in people with diabetes. Karlson and Agardh (1997) have found a moderate elevation of depressive symptoms in a group of people with insulin-dependent diabetes. The degree of depression is not related to disease severity, but to perceived daily burden of living with the disease. Rajala et al (1997) confirm that psychosocial factors related to the disease cause depression. Goodnick (1997) found that pre-existing depression has been associated with an increased risk of developing diabetes and comorbid depression is associated with poorer diabetic control. The nature of the association remains unclear, but is thought to have a biochemical basis. In terms of antidepressant treatment (see Table 4.1), the tricyclic antidepressants are associated with worsening diabetes control because of the predominant influence on noradrenalin, whereas the SSRIs are associated with significant reductions in blood glucose levels related to the predominant effect on serotonin over noradrenalin reuptake (Goodnick 1997).

Cancer

Spiegel (1996) reports that about half of all people under medical treatment for cancer have a psychiatric disorder, usually with depressive symptoms. However, depression in people with cancer is frequently under-diagnosed and under-treated (McDaniel et al 1995). The diagnosis of depression is clouded by symptoms such as loss of appetite, weight loss, insomnia, loss of energy and loss of interest, all of which may be secondary to either cancer or depression. Some cancers may cause an organically-based depressive disorder (such as central nervous involvement by tumor); some anticancer drugs (such as the corticosteroids, vinblastine, vincristine, and interferon) can also cause depression (Massie et al 1994).

Depressed individuals with cancer need a thorough medical, endocrinological and neurological assessment. Treatment of depression for people with cancer improves their depressed mood and other depressive symptoms, improves their quality of life and may also improve their immune function and survival time (McDaniel et al 1995).

Spiegel (1996) notes that while earlier studies reported people with depression at higher risk of developing cancer, later studies have not confirmed a predictive relationship. However, anxiety about the possibility of having cancer may delay seeking medical diagnosis and thereby reduce prospects of long-term survival by 10–20 per cent.

Injury

Suicide is the largest single cause of injury-related death in Australia (DHFS & AIHW 1998a). Depression is a factor commonly associated with suicide in all age groups; the majority of people who die from suicide meet criteria for depressive disorder in the weeks before death (Barraclough et al 1974, Shaffer et al 1996). After a previous suicide attempt, depression is the next highest risk factor for youth suicide (Zubrick & Silburn 1996).

Through its relationship with drug-related harm, which was noted earlier, depression is also indirectly related to injury. Alcohol misuse, in particular, has now been well documented as a contributing factor to the frequency and severity of injury (DHFS & AIHW 1998a). The influence of alcohol is particularly notable in suicide (Hayward et al 1992), interpersonal violence, road injury, injury to young males, drowning, sport and leisure injury, and occupational injury.

2.4 The course of depression across the lifespan

Depression is often a recurrent disorder and a whole of lifespan perspective helps to understand the onset and evolution of the disorder. It manifests somewhat differently at different ages, and is associated with varying precipitating factors.

Childhood

Depression and anxiety symptoms occur in about 4–6 per cent of children screened for mental health problems, with about half of these children sustaining significant functional impairments and being in need of treatment (Zubrick et al 1995, 1997, Silburn et al 1995, Moon et al 1998). Depression and anxiety in childhood are likely to persist with age, if not effectively treated (Offord & Bennett 1994). A follow-up of a group of 80 children and adolescents receiving psychiatric treatment for depressive disorders has reported a fourfold risk of subsequent major depressive disorder in adulthood (Harrington et al 1990).

The presence of *any* mental disorder in childhood increases the risk for a mental disorder in adult life. In a four-year follow-up of children in the Ontario Child Health Survey, over one-quarter (26 per cent) of 4–12 year olds with emotional disorders continued in the same category when they were aged 8–16 years. The British National Child Development Study on the other hand has reported that childhood conduct disorders were associated with a higher risk of depressive disorder at the age of 23 years and later (Rutter 1991).

The Dunedin (New Zealand) Longitudinal Study provides some data on the development of depression from pre-adolescence to young adulthood in members of a birth cohort (Anderson et al 1987, McGee et al 1990). According to this study, depressive disorders, in terms of clinical diagnosis, are relatively rare in childhood but increase in the pre-adolescent years when gender differences emerge. It is clear that some vulnerabilities, possibly related to the risk factors identified in Section 2.2, are established in childhood.

Adolescence

The first onset of major depressive disorder and dysthymia often occurs in mid-to-late adolescence and this is the life stage of peak incidence. Figure 2.2 reveals that most new cases develop between the ages of 15 and 18 years (Hankin et al 1998). This period may be a critical time for examining vulnerability to depression because of the high rates and high risk of onset and also the emergence of a gender difference, with females exhibiting more depression than males.

Around 20 per cent of young people in the community suffer from depressed mood, with up to 43 per cent reporting feeling sad for at least two weeks in the past year (Cubis 1994). Five per cent of young people suffer from a depressive disorder and the prevalence of current major depressive disorder is 2.7 per cent, a considerable rise from less than one per cent in pre-pubertal children (NHMRC 1997). Incidence rates are much higher than those for adults (Lewinsohn et al 1993, Garrison et al 1997, Eaton et al 1997, Giaconia et al 1994).

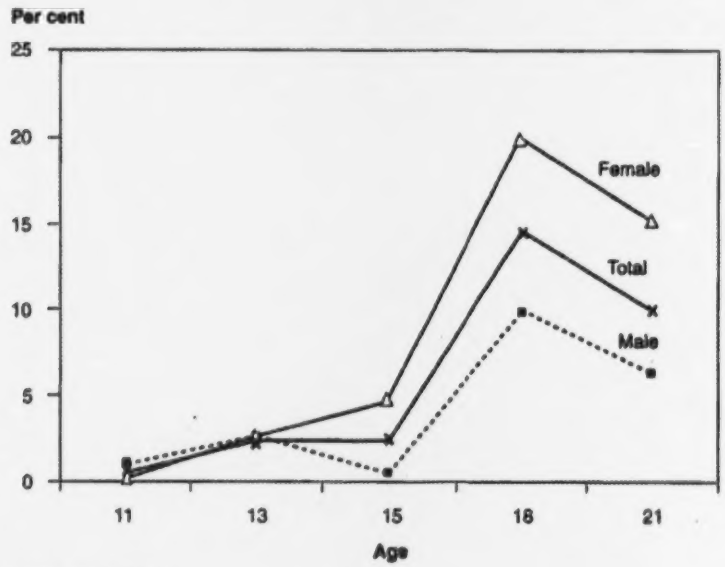
Community studies show that, for girls, there is a progressive rise in depressive symptoms from menarche, so that by the mid-teens girls exhibit at least twice the prevalence rate of males (Patton et al 1996a, Angold et al 1998). The cause of this striking rise in the incidence of depressive symptoms in adolescent females is as yet unknown, but hypotheses include the influence of female gonadal hormones, psychological changes that accompany puberty and changes in social roles. The rise appears to be the reason for the gender difference that persists through the reproductive years until the menopause (Kessler et al 1994). Jorm (1987) notes that the gender difference is not as evident in either childhood or old age.

Hunter (1992) states that Aboriginal children and young people experience at least the level of mental health problems evident in the general youth population, but are even further disadvantaged because they have less access to services. He also notes that some depressive symptoms may be reactions to disadvantage, racism and perceived oppression. There are, however, no epidemiological data comparing Aboriginal and Torres Strait Islander peoples with non-Indigenous populations.

Data on the natural history of adolescent depression are sparse, and while the majority of episodes appear to resolve spontaneously within around six months, the duration of adolescent depression varies considerably between individuals, from two weeks to many years. An episode is a risk factor for further episodes of disorder; the risks for subsequent episodes are increased sixfold for males and fourfold for females (Nolen-Hoeksema et al 1992). At least 50 per cent of adolescents who experience a depressive disorder subsequently suffer one or more occurrences (NHMRC 1997). These findings indicate the importance of effective intervention to ensure prevention of relapse in adolescents who have experienced an initial depressive disorder.

Table 2.1 presents the results from follow-up studies of a group of clinically referred 8–13 year olds for the first episode of major depressive disorder or dysthymia (Kovacs et al 1997). The authors report that the mean duration of first episode is likely to be up to four times longer in such clinically referred young people compared to young people in community settings. For dysthymia, however, mean duration could be equally long in both community and referred settings. Compared with major depressive disorder, dysthymia is more likely to be prolonged and to have comorbidity with behavioural disorders

Figure 2.2: Development of new cases of clinical depression, by age and sex



Source: Hankin et al (1998).

Table 2.1: Outcomes for a group of clinically referred 8–13 year olds for first episode of major depression or dysthymia

Indicator	Major depression	Dysthymia
Onset	7.75 to 14.01 years (mean 10.96 years)	5.14 – 12.8 years (mean 8.71 years)
Median duration	9 months	3.9 years
Recovery rates	86%	7%

Source: Kovacs et al (1997).

Bipolar depressive disorder commonly onsets in adolescence, but its recognition as bipolar disorder is generally delayed until the explicit emergence of hypomanic symptoms. In comparison with unipolar depressive disorder, bipolar depression is relatively uncommon, affecting under one per cent of adolescents (NHMRC 1997).

Adulthood

The onset of depressive disorders also occurs for the first time in early adult life, and in half of these cases there may be a prior, external stressor (Judd 1997). It is suggested that 20 per cent of cases meet criteria for diagnosis as a depressive disorder for the first time before the age of 25 years (with symptoms developing during the previous six years) and 50 per cent before the age of 39 years (with symptoms developing during the previous 10 years) (Mrazek & Haggerty 1994).

Prevalence rates for depressive disorder have been estimated as 3.4 per cent for men and 6.8 per cent for women, over a 12-month period, for Australian adults. The rates for dysthymia are considerably lower, at one per cent for men and 1.3 per cent

for women (ABS 1998). Lifetime estimates of unipolar depressive disorder are variable and have been particularly prone to methodological problems (Parker et al 1997a, Kessler et al 1994). Bipolar depressive disorders are estimated to have a lifetime prevalence in Australia of about 1.5 per cent (Parker et al 1997b). Depressed mood is much more common and ranges from 9–20 per cent for current prevalence (Boyd & Weissmann 1981).

According to the US National Comorbidity Study the lifetime prevalence of major depression with a seasonal pattern is 0.4 per cent and depression with a seasonal pattern is one per cent.

The duration of the first episode of major depressive disorder varies by gender, with an average of 181 weeks for males and 114 weeks for females (Simpson et al 1997). This study reports that while most people recover from their first episode with a median recovery time of three years, the majority will have at least one more episode of major depressive disorder in the following five years, with recurrence being the highest in earlier years.

Studies of remission from depression have generally taken place in clinical rather than community settings. A follow-up study of people treated for depressive disorder suggests that 50 per cent recover within six months, but in about 10 per cent of people the disorder has a chronic course, defined as being ill for a five-year period (Keller et al 1992). There is also a common pattern of depressive symptoms between episodes of major depression that may be recurrences of either the original depressive episode or a different form of depression. Predictors of persisting symptoms include the initial severity of symptoms, earlier age of onset, family history of depression, and inadequacy of treatment during the acute episode.

Between 30 and 50 per cent of people who initially recover from a depressive disorder, following treatment, relapse in the short term when maintenance treatments are not used (Shea et al 1992). Factors associated with relapse appear to include persisting depressive symptoms, number of previous episodes of the disorder, and psychological risk factors (see section 2.2).

Postnatal depression

The 'blues', or brief episodes of depressed mood and tearfulness, occur in 50–70 per cent of women within one to ten days of childbirth (NSW Health 1994). The presence of the 'blues' in the immediate post-partum period is related to the subsequent development of postnatal depression (Cooper & Murray 1998). Ten to 15 per cent of women will suffer a major depressive episode within the first 3–6 months after childbirth (O'Hara 1987). Post-partum psychosis affects about two women per thousand deliveries and the risk of recurrence in subsequent deliveries is very high (Boyce & Stubbs 1994).

Risk factors for a depressive disorder following childbirth are predominantly psychosocial, such as marital conflict, the absence of personal support from spouse, family and friends, difficulties with the infant (pre-term, reflux, physical problems) and stressful life events. A previous psychiatric history, especially a previous depressive episode, is also a risk factor, particularly if there are obstetric complications during delivery (Cooper & Murray 1998).

Depression in the older years

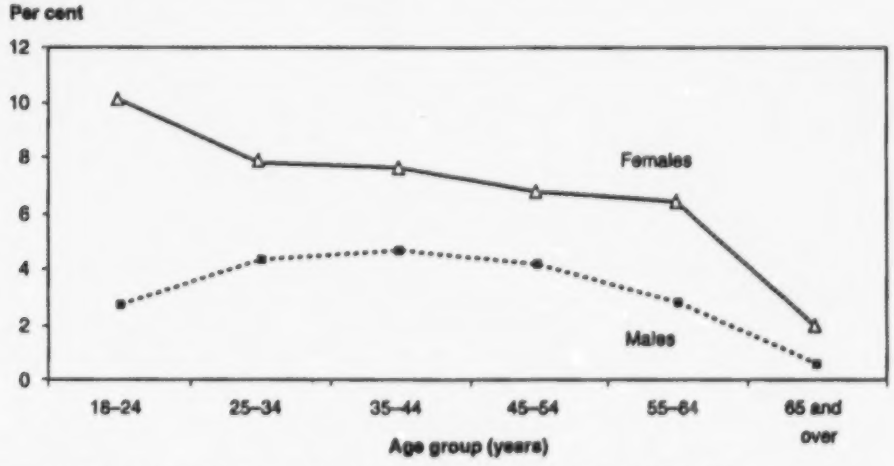
The prevalence of depressive disorders decreases with age among those who live in the community (Figure 2.3). However, some depressive episodes appear for the first time in later life and depression in older people has been shown to be more likely to persist if untreated. Depression in association with other disorders in older people may be a predictor of premature death (Henderson et al 1997, Ames et al 1988). Depression is often underdiagnosed in the older years (Snowdon 1998).

The prevalence of depressive symptoms is strongly related to living arrangements for older people (Phillips & Henderson 1991). Rates are lower among those who live in the community than among those in residential care. The 1997 SMHWB found that depressive disorder is experienced by less than one per cent of men and two per cent of women, aged 65 years and over, who were living in the community. Older people in residential care experience about twice the level of depressive symptoms as those in the community, and have a 20 times greater risk for major depressive disorders (Ames 1993). Between 15 and 42 per cent of residents in hostels and nursing homes experience a substantial level of depressive symptoms and between six and 18 per cent exhibit depressive disorders.

Depressive symptoms are also strongly related to physical health (Prince et al 1997a, Evans et al 1991) and loss of dear ones (Prince et al 1997b) in older people.

There is a link between depression and suicide at all ages. Traditionally, rates of suicide increased with age, particularly for men. Before the 1960s, rates among older men were high. However, over the past 100 years there has been a general reduction in the suicide rates among older people (Goldney & Harrison 1998). Currently, suicide rates tend to fall with age, except for men aged 80 and over, who continue to have the highest rates of all the age/sex groups (Figure 1.6).

Figure 2.3: Age-specific prevalence of depression, 1997



Source: 1997 National Survey of Mental Health and Wellbeing: Adult Component (ABS 1998).

2.5 Depression in specific population groups

The experience of depression varies across population groups. There are factors unique to Aboriginal peoples and Torres Strait Islanders, people from culturally and linguistically diverse backgrounds, rural and remote communities, defence services personnel and veterans, and children of parents with mental disorders that are of particular importance in terms of the expression, recognition and prevalence of depression.

Aboriginal peoples and Torres Strait Islanders

Depression, anxiety, substance use disorders, and high-risk behaviours are believed to be highly prevalent in Aboriginal and Torres Strait Islander communities (McKendrick et al 1992, Swan & Fagan 1991). It is clear from the work of McKendrick (1992, 1993, 1994) that a high proportion of people presenting to Aboriginal Medical Services have mental disorders, or are psychologically distressed. Studies have reported that more than 63 per cent of people in such settings have a significant level of distress, principally depression (Swan & Raphael 1995).

The *Ways Forward* report highlighted that the most significant and frequent problems identified by Aboriginal peoples and Torres Strait Islanders are grief, trauma and loss (Swan & Raphael 1995). These are identified in Section 2.2 of this report as risk factors for depression. Trauma, loss and grief derive from the history of invasion; the ongoing impact of colonisation; loss of land and culture; high rates of premature mortality; high levels of incarceration; high levels of family separations, particularly those involving the forced separation of children from parents; and Aboriginal deaths in custody. Domestic violence, sexual and physical abuse, and a whole range of other traumas also contribute (Swan & Raphael 1995). In studies of non-Indigenous communities, the extent of such traumatic separation, loss, abuse, dislocation, and dehumanisation can only be found in populations subjected to systematic torture, genocide, concentration camps, or urban or family violence.

Furthermore, the *Burdekin Report* highlighted that every Aboriginal witness discussed the long-term psychological effects that colonisation has had on Aboriginal peoples since 1788. 'As one witness said, "the pain and bitterness of these memories are passed on from generation to generation and results in feelings of hate, anger, frustration, grief, depression and alienation". These memories are reinforced by the continuing economic and social disadvantage experienced by Aboriginal peoples' (Human Rights and Equal Opportunity Commission 1993, p 693).

Some transcultural psychiatric surveys have suggested a low prevalence of anxiety and depression in Indigenous people. This often reflects the limitations of the observers. A key study by Morice (1978), who learned the Pintupi dialect, reported an extraordinarily rich description of terms to describe grief, depression, fear and anxiety among the Pintupi people. The glossary of terms ranged across varying grades of severity, from grief and disappointment through to loneliness and depression, and serious mood disorder.

People from culturally and linguistically diverse backgrounds

People from culturally and linguistically diverse backgrounds comprise a substantial proportion of the Australian population, increasing from just over 19 per cent in 1947 to more than 59 per cent in 1993 (Minas et al 1996). They are a diverse group from many different ethnic communities. Size, length of establishment in Australia, nature of migration experiences, English language competency, degree of assimilation and level of specific ethnic community support are factors which differentiate communities. Determining prevalence is complicated by such issues as sampling and also by cultural differences in the definition, conceptualisation, experience and reporting of depression.

The ABS has produced prevalence rates for affective disorders in people born in non-English-speaking countries showing that the rate is lower than for people born in Australia (ABS 1998). However, it should be noted that respondents with poor English-language competency were not included in the sample.

Refugees, who comprise 10 per cent of the annual migrant intake, are a distinct group with a very different profile to other migrants. In particular, they meet the humanitarian criteria of having suffered persecution and gross violation of human rights. Culturally sensitive individual assessments of torture survivors have shown that 80 per cent of those accepting a referral for rehabilitation have a high level of depressive symptoms (Victorian Foundation for Survivors of Torture 1997).

People living in rural and remote regions

There are limited comparative data available on depression in rural areas in Australia. However, suicide death rates for men living in rural areas have been consistently higher than for men living in urban areas, particularly for young men aged 15–24 years. Given the association between depression and suicide this may indicate increased levels of depressive symptoms for rural men (see Figure 1.8).

A major disadvantage experienced by people in rural and remote regions is the lack of access to health services, including specialised mental health services, for depression.

Veterans and defence services personnel

Veterans and defence services personnel are specifically noted here, not only because they are particularly at risk of depression, but also because they may be served by separate health and entitlement systems through the Department of Veterans Affairs.

Most studies have been of United States Veterans, particularly Vietnam Veterans. In an analysis of the national Vietnam Veterans Readjustment Study, Keane et al (1998) has shown that exposure to war zone stress contributed to the development of not only PTSD, but also a wide range of psychiatric disorders, including depression. According to this study, women veterans are particularly likely to react to these stressors with depressive symptoms, whereas men are more likely to develop PTSD and substance use disorders.

In an Australian sample, O'Toole et al (1996) have revealed a clear, close relationship between dysthymia and combat exposure. Veterans are also at

increased risk of depression through more generic risk factors, such as marital breakdown (DVA 1998).

Little research has been carried out on the mental health of veterans of World War II, although a study of former prisoners of war of the Japanese has found that they had very high rates of depression in the decades following the war compared to a control group of ex-servicemen (Dent in press).

Children of parents with a mental illness

Children who grow up with a parent who has a mental disorder are at a higher risk of depression either through increased genetic susceptibility to mood disorder or schizophrenia or because there may be gaps in parenting because of mental illness. Marriages where one partner has a mental disorder tend to have a higher rate of separation and divorce. If the parents do not separate, there are likely to be lengthy periods where one parent cares for the children while the other parent is in hospital (Goodwin & Jamison 1990).

Children of parents with a mental disorder report feelings of powerlessness to help the parent, feelings of abandonment and neglect while the parent is ill, and fears of becoming like the parent or developing a similar illness to the parent. It may take some time for the child to understand what is happening, and parents may be unwilling or unable to explain to children what depression is and what is happening to their mother or father. Depression in a parent can be experienced by children as rejection or something caused by the child's behaviour (Duke & Hochman 1992).

Children with younger siblings often take on increased family responsibility while the parent is ill or hospitalised. Mothers who are depressed and who have dependent children are often not hospitalised because of difficulties in finding care for the children or because the severity of the depression is not recognised. Few mental health facilities offer childcare or assistance with care of dependent children. Community support services for people with disabilities often do not cater for adults with a depressive disorder or other mental disorders who have dependent children. Consequently, many children live with a severely depressed parent who may be unable to adequately care for them. Adult children of parents who suffered from depression have reported that they received little or no counselling or information about what was happening to their parent(s) and that this lack of information and understanding added to their distress (Human Rights and Equal Opportunity Commission 1993). Children in this situation may find themselves taking responsibility for getting the parent into medical care or coping with the aftermath of an attempted suicide by the parent (Cronkite 1994).

2.6 Impact of depression

Depression causes a substantial burden of morbidity, disability and mortality. Some of these disability outcomes are summarised in Box 2.3. In direct monetary terms, it is estimated that in 1993–94, $521m was spent in health system costs associated with depression (Mathers 1998). However, the true burden in terms of health resources, personal suffering and detriment to quality of life, including stigma and possible discrimination, is not possible to quantify. Depression impacts not only on the individual, but also on their family, their friends and colleagues, and society in general.

The 1997 SMHWB confirmed high rates of disability associated with depressive and other common mental disorders. Those with affective disorders (which include major depressive disorder and dysthymia) had close to three times the number of disability days of those who were well. This rose to six times the number of days of not fulfilling normal role obligations where affective disorders were associated with physical illness.

Box 2.3: Disability outcomes associated with depressive disorder

High levels of disability are reflected in:

- *impairment in work productivity;*
- *days lost from work;*
- *educational failure;*
- *poor family functioning;*
- *poor social functioning;*
- *diminished sense of wellbeing;*
- *utilisation of medical services; and*
- *visits to medical clinics.*

Even more, disability at a population level may be associated with depressive symptoms due to their high prevalence. With as few as two depressive symptoms, high levels of household strain, social irritability, financial strain, limitations in physical or job functioning, restricted activity days, bed days and poor health status are reported (Judd et al 1996). From a population, societal or 'service burden' perspective, more medical service utilisation, suicide attempts, and other indicators of impairment arise from individuals with depressive symptoms, because of their high prevalence in the community, than from individuals with major depressive disorders (Johnson et al 1992).

When depression co-occurs with any other psychological or physical condition, it produces more disability than if it occurs on its own. For example, one study has reported that depression alone causes occupational dysfunction in 39 per cent of people with that disorder, but if depression is comorbid with another disorder, the disability is present in up to 48 per cent of all such people (Sartorius et al 1996).

Another impact of depression can be illustrated in the relationship between suicide and depression. People suffering from depressive disorders have a risk of suicide 30 times that of the general population (Chipps et al 1995). The highest risk is experienced by males with a diagnosis of major depressive disorder who have been discharged from hospital in the last four weeks. Using estimates of population attributable risk, the elimination of depression and related disorders could reduce the incidence of serious suicide attempts by 80 per cent (Beautrais et al 1996).

2.7 Depression research in Australia

Australia has a significant history of research on depression. Notable early achievements were Cade's work on lithium as a treatment for bipolar disorder (Cade 1949) and Kiloh's work on the classification of depressive disorders (Kiloh & Garside 1963).

In recent years, Australia has contributed around 2–3 per cent of the world's scientific publications on depression, which is commensurate with its efforts in other areas of health research. The major themes dominating recent publications have been: classification, assessment and diagnosis; depression comorbid with other health problems; causes of depression; and biological treatments. Most published research has been carried out with people receiving specialist treatment for depression. Consequently, there is a need for research based in the community and in primary care, on depression in children and adolescents, and on psychosocial treatments and prevention.

Pharmaceutical companies are major sponsors of trials on antidepressant medication. As a result, this research focus is relatively well supported. In contrast, research into population-based epidemiology and prevention and early intervention techniques does not have a strong funding base. Research on the effectiveness of non-pharmacological interventions, alone and in conjunction with drug treatments, needs to be supported.

The major source of public funding for depression research is allocated through the NHMRC. The NHMRC allocates funds to a large program on depression based at the School of Psychiatry at the University of New South Wales, as well as five project grants. They also allocate funds to one network grant and one unit grant, both of which are only partly on depression. Some of the work of the NHMRC Psychiatric Epidemiology Research Centre and the Australian Neuroscience and Mental Illness Research Network is also devoted to depression. It is estimated that the NHMRC allocated $1.25 million to depression research in 1998, which represented 0.8 per cent of its total funding for research and 26 per cent of its funding in the disciplines of psychiatry and psychology. The Australian Research Council (ARC) also allocates for research in psychology. In 1998 there was one Large Grant on depression, worth $30,000.

As well as the research funded by the NHMRC and the ARC there is an important contribution from the Commonwealth, State and Territory health departments. A notable achievement in 1997 was the National Survey of Mental Health and Wellbeing, conducted by the Australian Bureau of Statistics with funding from the Commonwealth Department of Health and Aged Care. This survey provided the first national data on the prevalence of depressive disorders and on the effects of depression on service use and disability in Australia. Other contributions to depression research are made by State governments, for example, by the Victorian government through its funding of the Mental Health Research Institute of Victoria.

3 Depression indicators

Chapters 1 and 2 provide an overview of the epidemiology of mental health and depression in Australia across a broad range of issues. Most of the information included is descriptive in nature, compiled to provide a status report on the burden of depression in the community. Where available, time-series information has also been included to show trends. Information from one-off collections has also been used to profile mental disorders, in particular depression, in Australia.

This chapter summarises the burden of depression in Australia using a set of priority indicators. These indicators—specific to the NHPA initiative that takes a *goals and targets* approach to health monitoring, with time-series used for measuring health outcomes—have standard definitions, and have been designed to extract information on various aspects of the disorder. The NHPA indicators differ from other types of health indicators in that they are forward looking, provide indirect information about future achievements based on historical trends, and can be linked to strategies for achieving set targets.

These indicators have been developed and prioritised using a set of criteria. A resolute criterion used in developing these indicators has been that the relevant data are being collected on a regular basis, or that there is a commitment to put systems in place to collect that information, so that trends over time can be monitored. It was also considered desirable that the indicators reflect social goals. This required taking an integrated approach to health monitoring by tying the NHPA indicators to outcomes for social justice and access issues.

The most important feature of NHPA indicators is their wide ownership. Developed with multi-stakeholder input, these indicators are likely to be influential, valid and reliable measures for monitoring progress towards better health outcomes in Australia.

3.1 List of NHPA indicators

The indicators listed in Table 3.1 have been developed by the AIHW following consultations with various stakeholders.

Table 3.1: Depression indicators for biennial NHPA reporting

Number	Indicator	Reported in 1998
1	**Prevalence of anxiety and depression**	
1.1	Prevalence rates for anxiety and depression symptoms in: a) general population b) children and adolescents c) adults	✘
1.2	Prevalence rates for depressive disorders in: a) general population b) children and adolescents c) adults	✔
1.3	Prevalence rates for anxiety disorders in: a) general population b) children and adolescents c) adults	✔
1.4	Prevalence rates for women who have given birth and who experience post-partum depression over the following year	✘

(continued)

Table 3.1: Depression indicators for biennial NHPA reporting (continued)

Number	Indicator	Reported in 1998
2	**Suicide and self-inflicted injury**	
2.1	Hospital separation rates for suicide and self-inflicted injury among:	
	a) young adults, aged 15–24 years	
	b) older people, aged 65 years and over	✔
2.2	Death rates for suicide among:	
	a) young adults, aged 15–24 years	
	b) older people, aged 65 years and over	✔
2.3	Death rates for suicide in rural and remote areas among:	
	a) young adults, aged 15–24 years	
	b) older people, aged 65 years and over	✔
3	**Mental health literacy and awareness**	
3.1	Proportion of persons in the general community who:	
	a) recognise the symptoms of depressive disorders	
	b) rate treatment of depression as helpful	✘
4	**Best practice**	
4.1	Proportion of general practitioners who know and apply best practice guidelines for the identification and management of depression	✘
4.2	Proportion of perceived medication needs met among persons:	
	a) with depressive disorders	
	b) without depressive disorders	✘

Note: '✘' indicates that national information for the indicator was not available for 1998 reporting.

3.2 Trend spotting: indicator-based summary statistics

This section uses the NHPA indicators to provide a short summary of the impact of depression on the health of Australians, as well as emerging trends. Greater detail regarding each indicator is provided in Appendix 1.

The indicators described below cover two major aspects, the prevalence of depression and anxiety, and suicide and self-inflicted injuries.

Prevalence of anxiety and depression

Indicator 1.2: Prevalence rates for depressive disorders

- According to the 1997 SMHWB, almost six per cent of adults aged 18 years and over suffer from depressive disorders. The rate is much higher among females than males.

Indicator 1.3: Prevalence rates for anxiety disorders

- The prevalence rates for anxiety disorders are higher than the rates for depressive disorders, being almost 10 per cent among adults. Similar to depressive disorders, the rates are higher among females.

Suicide and self-inflicted injuries

Indicator 2.1: Hospital separation rates for suicide and self-inflicted injury

- Hospital separation rates for suicide and self-inflicted injury are higher among females aged 15–24 years than their male counterparts. The rates are also much higher among young adults (15–24 years), than those aged 65 years and above.

Indicator 2.2: Death rates for suicide

- Suicide rates are much higher among males than females, by a ratio of almost 6:1 in the age group 15–24 years and by a ratio of 5:1 among those aged 65 years and over. While suicide rates have shown downward trends among those aged over 65 years, no such trends are noted among young adults.

Indicator 2.3: Death rates for suicide in rural and remote Australia

- Suicide rates in Australia are higher as one travels away from large metropolitan centres to rural and remote areas. The relative increase is much higher among males aged 65 years and over in comparison to their female counterparts. The RRMA classification differentials for the older people are also much higher than those noted for young adult males (15–24 years).

The above indicators provide some information about depression and its impact in Australia. Since the information is based on limited time-series, no clear picture of depression trends in Australia emerges.

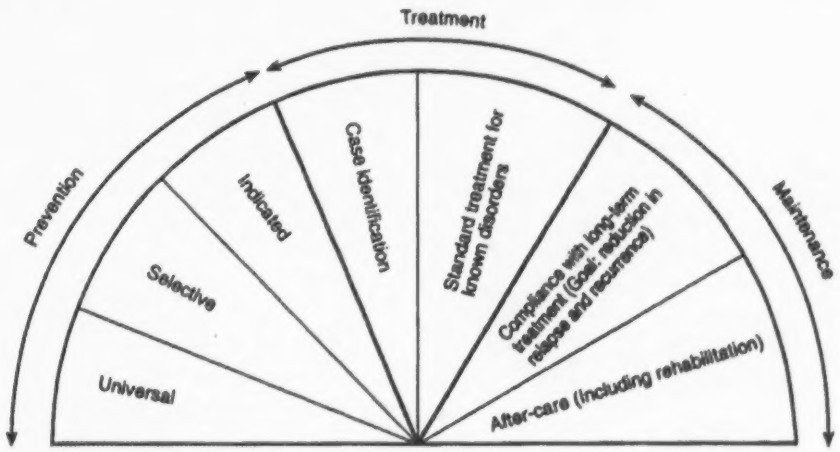
4 Prevention and management of depression

This chapter describes current practice and relevant issues for the prevention, treatment and management of depression in Australia.

The mental health intervention spectrum comprises prevention, early intervention, treatment and maintenance (management) in order to maximise mental health outcomes. Mental health promotion falls outside this spectrum, and aims to protect, support and sustain the mental wellbeing of the population by increasing the protective factors that lead to positive health outcomes.

Interventions able to impact on depression occur at many levels of the community and health sector. This continuum is illustrated in the model presented in Figure 4.1.

Figure 4.1: The mental health intervention spectrum for mental disorders



Source: Mrazek & Haggerty (1994).

Prevention and early intervention activities focus primarily on recognition and early management of risk factors that increase people's vulnerability to depression. Depressive symptoms may be averted through recognition and response to the presence of risk factors. Preventive interventions can be targeted universally at the general public, selectively at individuals or subgroups of the population whose risk of developing depressive disorders is significantly higher than average. Specifically indicated interventions can be aimed at high-risk individuals, such as people with existing depressive symptoms (Mrazek & Haggerty 1994).

Early recognition of depressive symptoms and first episodes of disorder and the provision of evidence-based treatments are major issues for treatment interventions. In managing depression, the aim is to provide best practice ongoing treatment and follow-up.

4.1 Promotion, prevention and early intervention

The risk of developing depression over a lifetime is so high that almost the whole population will at some time be affected by it, either directly or indirectly. The entire health workforce, therefore, has multiple roles to play in relation to mental health promotion, prevention and early intervention activities, in addition to treatment delivery.

Relevant health professionals include general practitioners, child and adolescent mental health teams, community nurses, maternal and child health nurses, student welfare personnel in school and tertiary educational settings, as well as youth and social workers who deal with marginalised and disadvantaged groups at high risk for depression. Also relevant are medical and nursing staff providing acute care in hospital settings, aged care assessment services, domestic violence agencies, drug and alcohol services, and counselling services.

The following section outlines some of the roles that health professionals can play in relation to promotion of mental health, prevention of depression and early intervention. Although research into the impact of these activities is still in its infancy, the few studies available to date are encouraging.

Promotion

Mental health promotion contributes generally to improving mental health and wellbeing, and may thereby indirectly prevent depression. Promotion activities improve people's knowledge and skills and strengthen their ability to deal with difficult life situations. Those might include community awareness campaigns related to known risk factors at a community level, such as unemployment, certain types of stress and social isolation.

To have maximum impact, mental health promotion is necessary at all societal levels, from the family to the wider community. Ultimately, the work of mental health promotion takes place in homes, schools, work and social settings and is not the responsibility of the health sector alone. Barriers to optimising mental health need to be identified and appropriate responses integrated into public policy. Supportive environments need to be created and maintained. Health workers have a key role in supporting the development of positive social environments in home, educational and work settings, as well as promoting 'life skills' relevant to dealing with social adversity. Empowering communities to work towards common goals that enhance the wellbeing of their members can occur through strengthening community action. In this sense, the social connectedness of communities may be a powerful, but unrecognised, protective influence on mental health (Leeder 1998).

At the most basic level, the public must have the skills and knowledge that enable them to recognise depression, to undertake appropriate self-care, to utilise informal supports, and to seek effective professional help if necessary. Knowledge of this sort has been termed 'mental health literacy'. A national survey of the Australian general public examined recognition of depression and beliefs about the helpfulness of various professional and non-professional treatments, revealing that only 39 per cent of respondents could recognise depression, but that most respondents believed depression was treatable (Jorm et al 1997a). The mass media has an important role to play in providing timely, accurate and sensitive promotion material.

A high level of mental health literacy among the public would make it more likely that depression is recognised as early as possible and effective action taken. Within Australia, a great deal has been done to increase public awareness of depression. For example, the *NHMRC Clinical Practice Guidelines* (see Box 4.2) included a brochure to assist young people to understand and identify depression and to find appropriate sources of treatment.

Elsewhere, the United States has a *National Depression Screening Day* during which health care facilities offer free screening and advice (Jacobs 1995). An anonymous automated telephone screening system was also trialled (Baer et al 1995). These events have led large numbers of people to seek screening and have achieved considerable publicity about depression. The success of these activities highlights the importance of mental health promotion to increase public awareness of the nature of depression and its treatment.

Prevention across the lifespan

Recently, attention has turned towards universal, selective or indicated interventions that attempt to divert those at high risk of developing depression and those with current depressive symptoms away from the development of a major depressive disorder. Effective prevention of mental disorder requires:

- identification of risk and protective factors that influence the development of the disorder;
- effective methods of decreasing risk factors and enhancing protective factors;
- identification of those at risk; and
- the availability of funding and systems to enable prevention activities to take place (Spence 1996).

There is substantial literature relating to risk and protective factors for depression, as described in Chapter 2, Section 2.2. Furthermore, research has shown that many of the risk and protective factors are potentially amenable to change, and that screening measures are available to identify individuals at risk. There has been little research to date that directly investigates the effectiveness of prevention and early intervention approaches in reducing the incidence and prevalence of depression. However, the available evidence provides an optimistic picture for the future.

Australia is emerging as a world leader in the prevention of mental health problems in children. Prevention programs are being evaluated in several locations throughout Australia, as outlined below.

Early childhood/preschool

The quality of parenting is a major contributory factor in the development of depression throughout childhood, and the family is a critical setting for preventive interventions. Coercive, aggressive parenting is known to produce high levels of mental health problems in children, particularly conduct disorder, when compared with supportive and nurturing care (Sanders & Markie-Dadd 1996).

The 'Triple P' Positive Parenting for Preschoolers Program aims to enhance parenting skills and deals with marital discord and other risk factors, such as depressive disorder in the mother. It has been shown to be effective in the prevention and early management of conduct and antisocial problems, and is also likely to be helpful for comorbid conditions such as depression and anxiety.

Primary school aged children

To date, the majority of school-based preventive interventions have aimed to influence general mental health risk factors through programs that build children's skills in social problem solving, optimistic and practical thinking, and handling aggression. One of the longest-running and most extensively evaluated school-based programs is the Primary Mental Health Project (Clarke et al 1993). The implementation of this program in California exposed 47,000 children from 700 schools to screening and short-term (12 contacts) intervention, which substantially reduced levels of emotional disorder associated with acting out, shyness, anxiety and learning problems.

Gillham et al (1995) have reported one of the few studies that focused specifically upon the prevention of depression. Their program represents a selective intervention in which children identified as 'at risk' on the basis of mild symptoms of depression or family problems, received a 12-week intervention that taught them to identify negative thinking patterns and use more optimistic ways of thinking, problem solving skills, assertive strategies, negotiation skills and relaxation techniques. Evaluation at two-year follow-up showed significantly fewer depressive symptoms and a lower level of onset of new depressive symptoms among the intervention compared with the control group. An Australian version of this program, Aussie Optimism, is currently being trialled in Western Australia. It remains to be determined whether prevention programs of this type are better targeted at children who already have mild symptoms of depression or whether they are beneficial when presented more widely to whole classrooms of children.

Adolescence

Researchers have recently started to examine the feasibility of preventing the development of depression in adolescents. Clarke et al (1995) have conducted an indicated prevention program with high school adolescents who were assessed as showing depressive symptoms, but who did not yet meet the criteria for a depressive disorder. These young people were randomly assigned either to a 15-session cognitive group intervention to identify and challenge negative or irrational thoughts or to a 'usual care' control condition. The incidence rate for affective disorders over the next 12 months was 14.5 per cent for the intervention group compared with 25.7 per cent for the control condition. Interestingly, these same researchers failed to find a protective effect for a more universal preventive intervention implemented within the context of the regular classroom. However, this universal intervention lacked a skill-training component to rectify the social skills deficits associated with depression in young people.

In Australia, several programs designed to prevent the onset of depression in young people are being trialed. These include the Gatehouse Project in Melbourne, the Problem Solving for Life Program at the University of Queensland and the Resourceful Adolescent Project at Griffith University. The Gatehouse Project is a school-based program that aims to prevent or delay the onset of depression through enhancement of the emotional wellbeing of young people. This is being done through a comprehensive whole-school strategy to promote social environments in which people feel secure, have a sense of belonging and are positively regarded. The data from this project strongly suggest that this strategy may lead to enhanced emotional health and has indicated great scope for the promotion of security, social connectedness and positive regard as core activities of everyday school life. The Problem Solving for Life Project is also a classroom-based intervention that has prevention and early intervention components. This single-term curriculum is

designed for administration by teachers and shows young people how to identify their problems, approach them in a constructive and adaptive manner and learn strategies for problem resolution. The results of the Problem Solving for Life projects should be available within the next 12 months.

The Resourceful Adolescent Project also contains prevention and early intervention programs designed for adolescents (RAP-A) and their parents (RAP-P). The adolescent component represents an experiential, resilience-building program designed to promote positive coping abilities in the face of stressful and difficult life circumstances. The parent intervention promotes parental self-esteem and methods for dealing with parent–adolescent conflict. Preliminary findings from this project showed reduced levels of depressive symptoms at post-intervention and 10-month follow-up, particularly for those adolescents who initially show high or moderate levels of depressive symptoms.

Adulthood

In adulthood, preventive approaches to date have been largely selective, focusing primarily on the risk of depression associated with life changes and adverse life experiences. Evidence-based preventive interventions have been shown to lessen vulnerability to depression associated with childbirth, bereavement (Raphael 1977), divorce (Bloom et al 1982, 1985), traumatic experiences, other losses, unemployment (Proudfoot et al 1997), and illness. Further details of these types of interventions are provided in the 'Indicated and early interventions for high-risk situations' section that follows. These interventions can also help children in families experiencing such adverse circumstances.

Older persons

Prevention for older persons may focus on experiences of loss, social isolation, physical disability and organic mental syndromes, such as early dementia, which contribute to depression in old age (Phifer & Murrell 1986). The high prevalence of depressive disorders in older people living in residential care settings needs to be acknowledged and addressed (Ames 1993). Depression in older people is commonly under-diagnosed and under-treated (Snowdon 1998). For older women, enhanced wellbeing and mood may be linked to appropriate hormone replacement therapy (HRT).

Specific preventive programs have also been shown to be effective in preventing stress in carers of people with dementia (Brodaty & Gresham 1989).

Indicated and early interventions for high-risk situations

Postnatal depression

Postnatal depression is a disorder that is likely to recur and may become chronic. It has negative effects on the development of the child, relationships with other children and the marital relationship (Boyce & Stubbs 1994, Boyce 1995). To lessen its impact, an understanding of risk and promotion of good obstetric care are imperative. Screening measures, such as the Edinburgh Post Natal Depression Scale, are useful to predict women at risk of postnatal depression (Boyce 1995). Programs to provide antenatal psychosocial screening as part of routine antenatal care could identify opportunities for prevention or early intervention programs and link women (and their partners and families) to appropriate psychosocial support and, if necessary, prevention, counselling or treatment.

Brief psychosocial interventions that encompass active listening, providing information, education and support by midwives in the postnatal ward have been shown to be effective in preventing postnatal depression (Boyce et al 1998). Programs need to include appropriate psychosocial interventions to support parenting as well as provide an understanding of infant development. They need to enable the woman to manage her anxiety, talk through the birth experience (especially if traumatic), and deal with the myths of motherhood. Education and support of the partner are also important. Ideally, programs should incorporate the entire childbirth process, from antenatal care to postnatal follow-up, and should integrate the whole spectrum of interventions including prevention, early intervention and treatment (Barnett 1995).

Postnatal depression and risk of child abuse are often strongly associated, and both may be prevented through improved antenatal care, postnatal care and subsequent specialised home visiting and support. Programs that support pre-term infants and high-risk disadvantaged mothers through supportive skilled home visiting have been found to significantly reduce parental abuse of infants (Mrazek & Haggerty 1994, Newpin & Homestart cited in Barnett 1995).

Special recognition and outreach programs in different cultural settings are essential (NSW Health 1996). Cultural understanding of birth practices for Aboriginal and Torres Strait Islander women and migrant and refugee women, and appropriate recognition and provision of these, may also help to prevent postnatal depression and lessen the likelihood of negative developmental outcomes for the child.

Children of parents with a mental illness

Children of parents with mental disorder have been identified as a high-risk group. Programs dealing with parental mental illness, particularly parental depressive disorder or alcoholism, are likely to have positive and possibly preventive benefits for this age group. Along with the prompt recognition and treatment of depression in the parent, the education of the family about related psychological factors is important. Beardslee et al (1992) have reported a specific trial with an educational intervention for adolescents whose parents have mental illness, but the final outcomes of these studies are not yet available.

Carers

Much of the work of caring for people with a disability and chronic illness is carried out by family carers. Around one in 20 Australian households has a family carer, most of whom are middle-aged married women looking after disabled or chronically ill parents, husbands or children (Schofield & Bloch 1998). Although many carers cope well with this work, some develop anxiety and depression symptoms as a result of the demands put on them. Particularly vulnerable are carers who are parents, younger carers, those caring for a person with behavioural problems, and those who have had to give up paid work (Schofield & Bloch 1998). There is evidence that interventions for carers that provide training, support and counselling can reduce symptoms of anxiety and depression and can prevent the placement of the disabled person in residential care (Brodaty & Gresham 1992, Mittelman et al 1996).

Bereavement and other losses

Higher levels of depression and anxiety symptoms have been reported as a consequence of bereavement. Preventive intervention programs for high-risk widowed people have repeatedly demonstrated effectiveness in lessening a range of

morbidity patterns including depression and anxiety symptoms (Raphael 1977). Childhood bereavement interventions can also contribute to prevention of depression and anxiety symptoms (Black & Young 1995). Parents who experience the death of an infant are also at high risk and symptoms of anxiety and depression may be lessened by interventions (Murray et al, 1998).

Relationship and marital problems

Relationship stressors may contribute to the development of depression symptoms. Ideally, the goal is to prevent the onset of relationship difficulties through preparation of couples for successful relationships. Several research trials have now reported convincing evidence of the benefits of behavioural marital preparation programs (Halford 1995, Markman et al 1993).

However, once relationship difficulties become established, interventions are needed to enhance relationship quality or to mitigate the effects of relationship breakdown. Such approaches have a wider protective impact on psychological wellbeing, particularly depression. The preventive benefits, lasting up to four years later, of a divorce intervention program was demonstrated by Bloom et al (1985), particularly for women.

For children and adolescents, parental divorce is one of the most common and serious negative life events confronting them (Hetherington et al 1998). Although the majority of children adjust relatively well following parental separation and divorce, for some children the consequences include depression, anxiety, anger and conduct problems (Amata & Keith 1991, Forehand 1992). The adverse emotional consequences of parental separation and divorce are influenced by the quality of the relationships between family members before, during and after the separation. The negative effects are greatly mitigated when positive relationships between the parents are maintained and the child is able to experience a supportive relationship with the non-custodial parent (Forehand 1992). Several effective programs have been developed to assist children to cope with parental separation and divorce (eg Pedro-Carroll & Cowen 1985, Short 1998), including the Children of Divorce Intervention Project for use on a small-group basis within schools.

Given this evidence, it is important that legislation and procedures relating to separation and divorce are designed to facilitate positive family dynamics in the face of relationship break-up. Procedures and counselling that enable parents to separate amicably and to resolve issues relating to custody, access and property settlement in a harmonious manner will play an important role in facilitating children's adjustment to divorce.

Traumatic and life threatening experiences

Intense, traumatic and life-threatening experiences such as rape, combat, and violent assault are associated with a high risk of PTSD and anxiety and depressive disorders. While initiatives such as debriefing do not prevent these conditions, short-term cognitive behavioural programs lessen trauma-related symptoms and may achieve some prevention outcomes for anxiety and depressive disorders. Positive outcomes have been demonstrated in post-rape, childhood abuse, and other trauma situations (Bryant 1997).

Physical illness

The relationship between depression and physical illnesses, including cancer and cardiovascular disease, was discussed in Chapter 2. There is evidence that simply asking the question 'Are you feeling depressed?' is an adequate screening procedure that can allow detection and appropriate further assessment and management in the case of physical illness comorbidity (Chochinov et al 1994). A preventive program for those who are highly anxious and potentially traumatised by life-threatening illness or treatment may have positive outcomes.

Work and lack of work

Occupational settings provide, largely unacknowledged, opportunities for a preventive mental health approach (Turner et al 1995). Workplaces have much scope to support and enhance the wellbeing of employees through their work practices and social environment. The implementation of family-friendly work practices may be important preventive measures.

In marked contrast, a body of evidence indicates an association between longer-term unemployment and depressive symptoms. The best solution is, no doubt, to alleviate the social and economic conditions that produce long-term unemployment. However, as a palliative measure, a cognitive behavioural therapy program was shown to produce significant positive changes in job seeking, as well as general wellbeing and mental health in a sample of people who were long-term unemployed (Proudfoot et al 1997).

4.2 Management of depressive symptoms and disorders

Depressive symptoms and disorders can be effectively managed if they are recognised and all the relevant issues are taken into account. A biopsychosocial approach that holistically considers all the interacting biological, psychological and social factors that affect the development of depression is important. This section describes the management options currently available for depression. These options include professional health care, which comprises psychological treatments and physiological treatments, as well as self-help strategies. Also covered are issues specific to primary care and across the lifespan and specialist treatments for depressive disorder subtypes. It should be noted that this section is not intended as a comprehensive description of the specialist treatment of depression, as that is a task for specialised clinical guidelines, such as the *NHRMC Clinical Practice Guidelines for Depression in Young People* (see Box 4.2) and the *RANZCP Clinical Practice Guidelines*. Rather, the purpose of this section is to highlight major issues for the management of depressive symptoms and disorders.

A biopsychosocial approach

A biopsychosocial management approach is particularly important for depression. All the contributing factors need to be addressed including, most importantly, the recognition of comorbid conditions and also identification of the associated psychological and social risk factors. This may require response from more than one service.

Most depression treatments can be offered within a primary care setting if the general practitioner is trained in the appropriate psychological and pharmacological approaches. For more complex, severe or chronic cases of depression, the general practitioner or other primary care provider may need to either refer the person to a specialist or work with a psychiatric specialist. People referred to specialist mental health services usually have longer episodes of depression and meet more diagnostic criteria for major depression than those treated in general practice (Sireling et al 1985).

Collaborative models between psychiatrists and general practitioners have been shown to improve outcomes and be more cost-effective compared to conventional primary care (Katon et al 1997, von Korff 1998). An important role for specialists is advising primary carers in their management of people with depressive disorders. There is also potential for self-help to be integrated with primary care (Holdsworth et al 1996). Integrated care models that are best suited to different subtypes of disorder are an area of potential research interest.

Professionals, other than psychiatrists, who provide specialised expertise in the prevention and treatment of depression include clinical psychologists and mental health nurses. In addition, other professionals such as counselling psychologists, social workers, and occupational therapists, who have had subspeciality training and experience in mental health, also contribute. These types of professionals cannot provide pharmacological treatments, but have an important role to play in providing a biopsychosocial approach for people with more complex disorders.

Regardless of the relative importance of antidepressants, treatment should also address depression risk factors and improve general coping skills. Successful management should involve counselling that addresses issues such as the difficulty most people have in coming to terms with having a depressive disorder and taking up problems of stigmatisation when relevant. Assisting the person with relevant social and psychological issues that emerge either at the initial assessment or subsequently is an integral component of good clinical care.

There is currently considerable activity in a number of Australian research centres in evaluating medical and psychological treatments, strategies for preventing relapse and approaches to the prevention of depression. In the last decade, virtually all antidepressant medications and mood-stabilising drugs have been trialled in Australia, allowing local expertise to be developed in relation to the effectiveness and side-effects of such drugs. Other studies have included an evaluation of Transcranial Magnetic Stimulation (TMS) as a possible alternative to electroconvulsive therapy (ECT). Australian researchers have also played a key role in evaluating the effects of psychological treatments such as cognitive and behaviour therapy, and in developing and evaluating psychological approaches for preventing relapse. In addition, studies have recently commenced that assess the benefits of programs that aim to prevent the development of depression among young people.

Self-care

Many people attempt to cope with symptoms of depression without professional help and all such attempts are included under the category of 'self-care' in this report. People may turn to alternative therapies, including naturopathy, exercise, relaxation and meditation. They may also use their social relationships for

informal 'counselling' and support. There is evidence to suggest that informal sources are a predominant source of help and generally a first step in the help-seeking process (eg Rickwood & Braithwaite 1994). Supportive social relationships are an important protective force generally and also in times of stress (Barnett & Gotlib 1988).

A prominent help-seeking strategy is telephone counselling. Telephone counselling provides anonymity, confidentiality and ensures the caller is in control of the experience. It is generally readily accessible, as neither distance nor transport problems prevent access. It has fewer waiting list delays, is relatively low cost, and is convenient for the caller. Telephone counselling services that are local, state-wide and national exist to respond to a broad range of issues that may contribute to a caller's mental health problems.

Little is known about the effectiveness of the diverse range of self-help strategies that people experiencing depressive symptoms use. Gould and Clum (1993), in a review of the literature, found only three controlled evaluations of self-help treatments for depression and these interventions produced only moderate immediate effects. There were insufficient data to draw conclusions about long-term effectiveness. Some evidence does support the widely held notion that physical exercise is beneficial for depression (Byrne & Byrne 1993, Martinsen 1994).

A meta-analysis has concluded that St John's wort (*Hypericum* extracts) was as effective as standard antidepressants for the treatment of mild and moderately severe depressive disorders, and that both St John's wort and antidepressants are significantly more effective than placeboes. Moreover, fewer people experience side-effects using St John's wort than using antidepressants (Linde et al 1996). Further studies of this substance are warranted, given its rapid uptake as a self-help measure in the community.

After, or concomitant with, attempts to deal with depression through self-help or utilising social support networks, professional care may be sought. There is evidence that professional health care treatment is better than no treatment, although many people with depressive disorders do have a spontaneous remission. In the 1997 SMHWB, 56 per cent of persons with an affective disorder (which includes depressive disorders) had used health services for that problem. The great majority (70 per cent) saw a general practitioner. The proportions seeing psychiatrists (15 per cent) and psychologists (11 per cent) were much lower. Rates of health service use for affective disorders were substantially lower in younger age groups compared with older age groups.

Psychological interventions

This section briefly describes the major psychological interventions used for depressive symptoms and disorders and the available evidence of their effectiveness. There is considerable evidence to demonstrate the effectiveness of psychological treatments for depression, with the majority of depressed persons showing long-term, sustained improvements (Brown & Schulberg 1998, Clarkin et al 1996, Jacobson & Hollon 1996). The psychological treatments for which there is the most evidence of effectiveness are cognitive, behavioural and interpersonal psychotherapies.

Cognitive therapy involves teaching individuals to identify their maladaptive and/or irrational patterns of thinking and to challenge these in the light of evidence. The aim is to teach the depressed person to develop a more realistic, positive and adaptive view of the world, themselves and the future (Beck 1967). This approach is based upon evidence that depressed individuals tend to interpret events in an excessively pessimistic way and to hold a variety of distorted patterns of thinking (Seligman 1975). Other cognitive-behavioural techniques that are effective components of the treatment of depression include increasing participation in pleasant events, and training in problem-solving skills, self-monitoring, self-evaluation, self-reinforcement, relaxation, and social skills (Lewisohn 1974, NHMRC 1997). In most instances, treatment involves a combination of these approaches rather than any one element in isolation.

Interpersonal psychotherapy is another treatment that has been found to be effective in the treatment of depression for many people (Frank et al 1991, Elkin et al 1989). This approach involves the therapist helping a person to systematically identify and resolve relationship problems that may contribute to depressive symptoms. It aims to improve the person's relationships and communications with others.

Studies to date have demonstrated minimal difference between cognitive, behavioural and interpersonal psychotherapies (Clarkin et al 1996, Elkin et al 1989, Gloaguen et al 1998). Similarly, there appears to be minimal difference in the effectiveness of these psychological approaches and that of antidepressant medication for less severe depressive disorders (Clarkin et al 1996, Jacobson & Hollon 1996). There is, however, some evidence that relapse and drop-out rates are slightly higher for drug treatments than for psychological treatments (Clarkin et al 1996, Gloaguen et al 1998).

In practice, a variety of other psychological treatment methods, in addition to those outlined above, are used. For example, family and psychodynamic therapies are widely used in clinical practice, although there is little research as yet to determine their long-term effectiveness. Determining which types of psychological therapy are best suited to different subtypes of depression, at different stages of the lifespan, is an area of particular research need. Whatever psychological treatment is used, appropriate training in the technique concerned is essential. Clinical psychologists and psychiatrists receive specialist training in a range of psychotherapies. However, other health professionals, including general practitioners, are increasingly developing basic skills in psychological treatments to enable them to deal with many cases of depression.

Medical Interventions

The interventions used to manage depression by medical practitioners include both psychological interventions and medications. Specialist psychiatrists may also provide ECT. The complexity of training may influence the depth of psychological interventions that are provided. Pharmacological interventions are based on the knowledge that depressive disorders are associated with changes in the patterns of brain neurotransmitters. Medications are targeted to address these changes.

Antidepressant treatment

Antidepressants play an important role in the treatment of depressive disorders. They can be prescribed only by a medical practitioner, usually a general practitioner or psychiatrist. Table 4.1 presents the drugs commonly used to treat depressive disorders.

Tricyclic antidepressants (TCAs) are the most commonly prescribed antidepressants in Australia (Mitchell 1997). There are newer drugs (eg SSRIs) that are safer in relation to risk of overdose, although there is some concern that they may be less effective in the treatment of severe cases of major depressive disorder or disorder with melancholic symptoms (Mitchell 1997).

A major factor to be taken into account is antidepressant choice. When medications are of equivalent efficacy, it is important to prescribe those associated with higher tolerance, lower toxicity and less likelihood of treatment failure and side-effects. The newest antidepressants (such as the SSRIs) may, therefore, be indicated where there is otherwise equal efficacy.

Benzodiazepines (eg diazepam or Valium) are used for the treatment of anxiety. They should not generally be used as antidepressants and, if prescribed, should be used for brief periods only. The benzodiazepines may have some transient effect on depressive symptoms and temporarily relieve anxiety, but they cannot be regarded as true antidepressants. Furthermore, the risk of dependence is extremely high. For persons with depressive disorders that have the capacity to respond to medication, the prescription of an antidepressant is generally preferred. The Gotland study in Sweden focused on changing the custom of general practitioners to prescribe benzodiazepines and replacing such prescriptions with antidepressants. There were positive socioeconomic gains as a result of this change in practice and also a significant, and possibly related, reduction in the suicide rate (Rutz et al 1992).

It is recommended that an antidepressant should be trialled for several weeks before changing to a different treatment. Depressed persons who respond to acute treatment should have that treatment continued for at least four to nine months at the same dose, and long-term treatment should be considered for those with recurrent depression, particularly if it is severe (Mitchell 1997).

There is a strong case for continuing medication in depressed persons who have had at least one episode, where remission has been extremely slow or where the disorder has put them at grave risk of misadventure or self-injury. The dosage of such medications is generally lower than those required during the acute phase to reduce risk of side-effects, but there is evidence to support a maintenance dose akin to the acute treatment dose. When these medications are to be stopped (whether initiated by the treating practitioner or the person themselves), they should be slowly tapered to prevent many severe rebound or withdrawal effects.

A major issue concerning medication as a treatment for depression is its negative perception by the general community (Jorm et al 1997b, 1997c). To be effective, it is important for medication to be taken as prescribed. If the specific effects and purposes of the medication are made clear to the person for whom the medication is being prescribed, compliance with the drug regime is much improved.

Table 4.1: Drugs used in the treatment of depression

Type of drug	Generic name	Brand name
Selective serotonin reuptake inhibitors (SSRIs)		
	Fluoxetine hydrochloride	Lovan, Prozac, Erocap, Fluohexal, Lovan, Zactin
	Paroxetine hydrochloride	Aropax
	Sertraline hydrochloride	Zoloft
	Fluvoxamine maleate	Luvox
	Citalopram hydrobromide	Cipramil
Serotonin-noradrenaline reuptake inhibitor (SNRI)		
	Venlafaxine hydrochloride	Efexor
5-HT2 antagonist/serotonin reuptake inhibitor		
	Nefazodone	Serzone
Tricyclic antidepressants (TCAs)		
	Amitriptyline hydrochloride	Endep, Tryptine, Tryptanol
	Clomipramine hydrochloride	Placil, Anafranil
	Desipramine hydrochloride	Pertrofran
	Dothiepin hydrochloride	Dothep, Prothiaden
	Doxepin hydrochloride	Deptran, Sinequan
	Imipramine hydrochloride	Tofranil, Melipramine
	Nortriptyline hydrochloride	Allegron
	Trimipramine maleate	Surmontil
	Mianserin hydrochloride	Lerivon, Lumin, Tolvon
Monoamine oxidase inhibitors (MAOIs)		
Non-selective	Phenelzine sulphate	Nardil
	Tranylcypromine sulphate	Parnate
Selective	Moclobemide	Arima, Aurorix
Mood-stabilising drugs		
	Lithium carbonate	Lithicarb
	Carbamazepine	Tegretol, Teril
	Sodium valproate	Epilim, Valpro

Electroconvulsive therapy

ECT is the passing of electric current through the brain to produce a convulsion. The use of anaesthetics and muscle relaxants considerably modify the effects of the convulsion. ECT is provided by most general psychiatric hospitals, and by some private psychiatric facilities. While it may be administered by any medical practitioner, it is rarely given by other than psychiatry registrars or psychiatrists, and it should only be given by those who have been trained in the technique. The anaesthetic is given by either an anaesthetic registrar or anaesthetist, and nurses are also in attendance. It is a safe and effective treatment for depressive disorder that either fails to respond to antidepressants, or is of delusional intensity. It is occasionally used for manic symptoms that are unresponsive to medications, or where medication is contraindicated during further treatment.

ECT is usually only applied to the non-dominant hemisphere (one side of the brain —unilateral ECT). Bilateral ECT is often used with people who do not respond adequately to unilateral treatment. The most commonly reported side-effects of ECT are temporary confusion after treatment or memory loss. These side-effects are less likely with unilateral ECT.

The laws regarding administration of ECT vary by State and Territory. However, it is imperative to obtain the person's consent before each treatment. This is particularly important in view of the fact that ECT is a procedure that is not well accepted by the general community. It is more likely to be perceived as harmful than helpful (Jorm et al 1997b).

TMS passes a magnetic field in small, highly focused currents to the outer brain structures. It has been investigated in a number of overseas studies and suggested as an effective treatment for a variety of depressive disorders, including those suspected of having a more biological basis (Kirkcaldie et al 1997). Its suggested effectiveness is extremely important, as ECT causes considerable apprehension to many people. In comparison with ECT, TMS does not necessarily involve an anaesthetic or a convulsion, and short-term memory problems should not develop. An evaluative study has recently been completed at the Mood Disorders Unit, Prince of Wales Hospital, where unilateral TMS was compared to a 'sham' treatment. Both those people receiving TMS and the sham treatment improved in mood over the two-week trial and there was no significant difference between the groups. While the treatment was safe and not associated with any side-effects, there was no significant benefit demonstrated over the sham treatment. This is an important negative finding that requires further study. Currently, the researchers are involved in a new trial, with TMS being given bilaterally in comparison to the unilateral procedure used in the first study.

Issues in primary care

The first level of service providers in the health care system are primary care workers such as general practitioners, community nurses, generalist community health workers, and child and youth health workers. Other community workers, including those providing pastoral care, generalist youth and child services, telephone help-lines, support groups, alternative therapists, counsellors and other community gatekeepers may also be points of first contact. The critical issue for all primary care workers is an ability to recognise depressive symptoms, which comes through an understanding of the nature of depression, and to refer for further assessment or care, when appropriate.

Recognition and response in primary care

Recognition of depression is central to the management of depression in primary care. Some primary care providers, particularly general practitioners, are provided with extensive education programs, particularly through the pharmaceutical industry, and often in partnership with professional and academic bodies, to improve their skills in the recognition of and response to depression. This may help to redress potential inadequacies in their training. A survey of general practitioners has shown that most of the respondents find their undergraduate training in adolescent mental health issues, in particular, is inadequate and 64 per cent find it difficult to obtain advice on complex mental health problems (Veit et al 1996). Furthermore, studies suggest that primary care physicians vary

considerably in their ability to detect depression, with accuracy rates ranging from 25–75 per cent (Brown & Schulberg 1998).

To detect and appropriately treat depressive symptoms, it is important that the primary care provider obtains a full description of symptoms and associated risk factors. The capacity of the primary care provider to engage the person and to elicit a full description is vital. In the case of depressive disorders, symptoms may cause substantial suffering while also being vague, transient and variable. Depressive symptoms may be attributed by the person experiencing them and their significant others to a number of other causes or dismissed as 'normal', and not be presented to the primary care provider as a clear case of depression.

Consequently, when people seek professional help for a depressive disorder, they often do so in an indirect manner, for example by consulting for a physiological symptom such as pain or tiredness. Depression may also be comorbid with another presenting disorder, such as a physical illness, anxiety or substance use. The symptoms of the comorbid disorder may be more evident and if a thorough assessment is not undertaken the depressive disorder may be missed.

Recognition of depression in high users of health care services, who may have only one or two depressive symptoms, is also critical because of the high costs, poorer functioning and adverse outcomes in this group. Even a few symptoms of depression may be risk factors for the development of a major depressive episode (Judd et al 1997).

Screening for depression can be relatively simple; it has been shown that the question 'Are you feeling depressed?' can be effective in screening medically ill populations for depression (Chochinov et al 1994). Such a question can be used as the first of a two-stage screening process; those identified at higher risk by the screening question can then be followed up by a more detailed assessment.

A number of detailed protocols are available to assist with the assessment of depression in primary care settings. WHO initiatives on primary care psychiatry have developed a screening tool for mental disorders in primary care using a 20-item self-report questionnaire, a primary care version of ICD-10 diagnostic system and relevant education activities (Isaac et al 1995). Other initiatives include PRIME-MD, which is a screening questionnaire and interview for general practice settings, and SPHERE, which is an Australian national depression project developed as a collaboration between academics, clinical psychiatrists and general practitioners. The project is partly supported by a pharmaceutical company. The *NHRMC Clinical Practice Guidelines for Depression in Young People* (see Box 4.2) provide a protocol for recognising depression in young people. There are also numerous depression symptom questionnaires targeted at specific age groups (see Chapter 2, Section 2.1). These protocols and measures assist care by heightening awareness and improving symptom recognition, but need to be supported by appropriate clinical processes (see Box 4.1).

There is clearly a need to ensure that training and continuing education of primary care physicians includes the use of techniques to quickly determine the presence of depressive symptoms and disorder, and also of potential comorbid conditions, particularly anxiety.

Box 4.1: The use of clinical practice guidelines in general practice

The use of printed guidelines to facilitate general practitioners' decision making about appropriate health care or as a means of updating and educating seems like a simple and efficient way to reach a large number of general practitioners. However, there is little evidence that guidelines alone actually change the practice of physicians (Davis et al 1997, Gupta et al 1998). This ability is enhanced when combined with other educational strategies, such as academic detailing (Davis et al 1997, Davis & Taylor-Vaisey 1997). Recommendations on how guidelines should be formulated make their creation a costly exercise (Rice 1995).

A recent study by Gupta et al (1997) examining Australian general practitioners' views about, and recall of, clinical practice guidelines has shown that, while generally supported, barely half of the physicians report that guidelines have changed their practice. Most question the relevance of guidelines to general practice, believing 'experts' who do not understand general practice created them. Between six and 48 per cent were unaware of the existence of certain guidelines. The credibility of various agencies drafting the guidelines was also shown to vary amongst general practitioners.

There are very few Australian studies measuring the implementation of guidelines in clinical practice (O'Brien 1996, Ward & Holt 1997). A review of international studies on the dissemination and implementation of clinical practice guidelines has shown mixed results (Davis & Taylor-Vaisey 1997). Variables affecting adoption of guidelines included quality of the guidelines, characteristics of the health care professional and the practice setting, incentives, regulation and factors related to presenting persons. Weak implementation occurs with a mail-out alone or with didactic lectures; moderately effective uptake occurs with audit and feedback or opinion leaders; and the strongest uptake occurs with reminder systems, academic detailing or multi-faceted educational interventions.

Treatment in primary care

In primary care a biopsychosocial treatment approach that recognises the multidimensional nature of depressive disorders and the contribution of biological, environmental, social and psychological correlates is required.

Fundamentally, antecedent and coexistent disorders, such as anxiety disorders or substance use disorders, need to be specifically identified and encompassed in the management plan. Addressing a primary anxiety disorder is important because, if its treatment is successful, both current depressive symptoms and the chance of future depressive episodes may be reduced (Parker et al 1997b). It is also critical that potential suicide risk is assessed in all cases because of its high correlation with depressive symptoms, particularly feelings of hopelessness. The WHO has developed a useful educational package for the management of common disorders in primary care, specifically targeting depression and anxiety (Isaac 1995).

The Depression Guideline Panel in the US recently undertook an extensive literature review and meta-analysis and concluded that psychotherapies, such as cognitive behaviour therapy and interpersonal therapy, are slightly more effective than drug treatments for depressive disorder in primary care. Furthermore, drug treatments are associated with greater relapse rates and higher dropout rates (Clarkin et al 1996). However, acknowledging that many primary care physicians do not have adequate training in psychotherapy methods, the guidelines produced by the panel support the use of medications within primary care treatment of depressive disorder.

While there have been a large number of studies examining its efficacy, it is not always clear whether cognitive behaviour therapy (CBT) is generally superior or comparable to antidepressant medication in a primary care setting. An important

study was undertaken by Blackburn and Moore (1997) who observed a similar pattern of improvement for persons receiving treatment with CBT or antidepressant medication. In addition, maintenance cognitive therapy was shown to be as effective as maintenance medication at two-year follow-up.

Others conclude that people with depressive disorder do best with a combination of antidepressant medication and some form of psychological treatment (Mitchell 1997). A recent large scale study, reported by Thase et al (1997), provides clear evidence that a combined antidepressant plus psychotherapy approach is more effective than psychotherapy alone for people with severe depression. The effectiveness of antidepressants is well established for moderate to severe depression; while psychological treatments alone are most useful with mild to moderate levels of depression (Mitchell 1997). Brown and Schulberg (1998) note that antidepressant treatment outcomes in general practice settings improve if primary care physicians follow standardised treatment protocols that ensure use of appropriate drug dosages, management of side-effects and duration of treatment.

The challenge for primary care clinicians is to identify which treatments will best suit particular individuals. Psychotherapies should be the treatment of choice for depressive symptoms, while antidepressant medication alone, or in combination with psychological treatments, will be likely choices for depressive disorders. The need for combined therapy is indicated by an incomplete response to antidepressants or psychological treatments alone or a poor recovery from symptoms between episodes of depression. Other features that should suggest psychological therapy include chronic psychosocial problems, a previous positive response to psychological treatments, failure to respond to antidepressant treatment, and consumer preference (Mitchell 1997).

To fully treat depressive disorders, assessment of potential risk factors (see Box 2.2) is necessary along with management of the symptoms of the disorder. Relevant risk factors include past depressive disorder episodes, family history of depression or other disorders, recent stressors, environmental factors such as the family context and personality factors. It is also important to consider the children where one or both parents experience depressive disorders. When such risk factors are evident, a pluralistic management plan that incorporates a psychotherapeutic response to the risk factors would comprise best practice.

A paramount issue for primary care providers is their ability to provide such a biopsychosocial approach within their operational constraints. Specifically, the time required to take a full psychosocial history to carefully diagnose any depressive disorder, comorbid disorders and associated risk factors is prohibitive in busy general practice settings. Furthermore, this effort may not be adequately reimbursed by MBS payments. However, a comprehensive review of the structure and remuneration of services in the General Medical Services Table was undertaken by the Medicare Schedule Review Board in August 1997 as part of the joint Government/Australian Medical Association Relative Value Study. A completely new structure for attendance items has been agreed, designed to remove incentives that currently inhibit high quality practice in consultations.

Additionally, in terms of ongoing treatment, a primary care provider may not have either the time or the specific skills to provide both oversight of medications and psychotherapy. It is particularly important to identify methods by which psychotherapies can be made available in primary care settings. In some instances

this may involve collaboration between mental health specialists and general practitioners. In others, the primary care physician may be trained to conduct brief psychological treatments (Katon et al 1997). For depressed persons requiring specialised psychological treatments, referral to either a psychiatrist or clinical psychologist may be necessary, depending on factors such as individual therapist skill and cost (Mitchell 1997).

Current treatments for depressive disorder subtypes

The previous section covered management issues for depressive disorders generally. This section considers issues that are unique to particular depressive disorder subtypes. These subtypes were defined in Chapter 2 Section 2.1, and a diagnosis of a particular depressive subtype entails consideration of additional management issues as described below.

Unipolar major depressive disorder

For unipolar major depressive disorder, the task for the clinician is to determine the relative contribution of the varying contributing factors and to then attempt to direct therapy at those predisposing or precipitating factors, which include factors such as anxiety, personality and temperament. An approach considering antidepressant treatment only is often, therefore, inappropriate and insufficient.

Many studies and meta-analyses report the superiority over placebo of both antidepressant medications and psychotherapies, alone and in combination (eg Kirsch & Sapirstein 1998). There is some evidence to suggest, however, that antidepressant medication may be the treatment of choice for more severe unipolar major depressive disorder (Elkin et al 1989). In a 16-week study, CBT produced a similar outcome in comparison to antidepressant (imipramine) plus clinical management, placebo plus clinical management or interpersonal psychotherapy when data for the whole sample were analysed. However, for those in whom depression was severe, imipramine produced a superior outcome to all other interventions.

With psychotic symptoms

Meta-analyses indicate that ECT alone and combination antidepressant/ antipsychotic medication are the most effective treatments for unipolar depression with psychotic patterns, resolving the depressive disorder in some 80 per cent of cases (Parker et al 1992). Antidepressant medication alone or neuroleptic medication alone is substantially less effective, resolving the depression in 25–40 per cent of instances. Limited studies have been conducted to enable a conclusion about the comparative effectiveness of other combination treatments. There is increasing recognition that for older people, in particular, this condition may take a lengthy period to resolve, and presents a high risk of relapse.

With melancholic symptoms

Melancholic symptoms have been reasonably well established as predicting a 'superior response' to antidepressant medication (Rush & Weissenburger 1994). There is some accruing evidence to suggest that the SSRIs may not be as effective as the tricyclic medications. If tricyclic antidepressant medications fail, another older drug type (the non-selective MAOIs such as phenelzine and tranylcypramine) is often viewed by clinicians as having utility for depressive

disorder with melancholic symptoms. If such single treatments fail, combination and augmentation treatments are considered by adding drugs such as lithium or thyroid hormone (Silverstone et al 1998). If the antidepressants fail, ECT is a highly effective option.

Bipolar major depressive disorder

In the case of bipolar disorder the person may present in an 'up' (hypomanic or manic) phase or a 'down' depressed phase. If in a depressed phase, there are almost invariably melancholic or psychotic symptoms.

During an acute episode of mania, antipsychotic medication is often prescribed alone or in conjunction with a mood-stabilising medication (eg lithium, carbamazepine, sodium valproate). In addition, benzodiazepines may assist settling the person. ECT is used on rare occasions where it is of benefit to some people with severe manic episodes who do not settle rapidly with medication and who may be at risk of self-injury. During an acute episode of depression, treatment is prescribed according to the presenting symptoms.

When the natural history (and particularly episode frequency) of the disorder is not yet established, the person is presenting for the first time, or the person has had several episodes at rare intervals, treatment may focus on acute and continuation phases. This would mean maintaining some or all of the initial treatments for several months, rather than necessarily commencing with a mood-stabilising drug. Most people with bipolar depressive disorder who have repeated episodes benefit from being placed on mood-stabilising medication. The key issue is careful adherence to the medication regime.

Other depressive disorders

Clear recommendations cannot be made about established treatments for dysthymia and cyclothymia for two main reasons. The first reason relates to the complex nature of these conditions. For example, dysthymia is a mix of chronic mild depression, mixed anxiety and depression, and anxiety states with secondary depression. Secondly, as the suggested existence of these disorders has only been relatively recently described, few definitive treatment studies have been undertaken. The most commonly studied disorder is dysthymia where pharmacological interventions suggest some possible benefit, but not to the degree generally reported for the major depressive disorders.

Relapse and chronic depressive disorder

There is evidence showing that maintenance treatments with both psychological treatment and antidepressant medication reduce the risks of relapse in depressive disorder or, alternatively, increase the amount of time before relapse (Frank et al 1990, Kupfer et al 1992). These studies have shown that the preventive effect of medication is dose related and relapse is delayed if the maintenance drug dose level is high, akin to the acute treatment dose. Relapse is more likely with moderate dose levels and even more likely with the very low maintenance doses. There is also evidence that treatment reduces subsequent social impairments as a result of depressive disorder, though these effects occur well after symptomatic recovery. Relatively few data are currently available on the appropriate use of maintenance treatments in Australian health care settings.

Treatment issues across the lifespan

The management of depression discussed so far has applied generally to depressive disorders and its subtypes in the majority of cases. There are, however, issues specific to the management of depression at different stages of the lifespan.

Children and adolescents

Children, in particular, rarely complain of mental health problems. Rather, their parents, teachers and sometimes their peers complain about their problematic behaviour. There are often, however, prominent signs of mental health problems in children that should be recognised. For example, children who are depressed or anxious have been shown to be almost three times more likely to be performing below their age expectancy at school. They are also five times more likely to have been suspended or expelled from school and 11 times more likely to be reported by their teachers to have frequent problems in getting along with their peers (Zubrick et al 1997). 'Acting out' behaviour in children may, therefore, be an important indicator in the recognition of depressive disorder in children.

Depressive symptoms are frequently neither recognised, nor treated in adolescence. This is partly because adolescent distress may be mistaken as an inevitable part of adolescent development compounded by the fact that young people do not readily access health services. Furthermore, parents are reluctant to have their children labelled with a mental disorder. Depressive symptoms may also be masked by comorbid substance use (NHMRC 1997). The NHMRC clinical practice guidelines provide a comprehensive framework for identifying and treating depressive disorder in this age group (see Box 4.2).

Box 4.2: Clinical Practice Guidelines for Depression in Young People (NHMRC 1997)

These guidelines were developed through an extensive scientific review and consultation process. They describe best practice for the detection and management of depressive disorders in adolescents. There are several components to the guidelines: a scientific report; guidelines for mental health professionals; guidelines for general practitioners; and consumer booklets, one in comic-book style (these latter were carefully focus-tested and evolved in consultation with young people). The guidelines also aim to help prevent suicide in this age group ,and are being implemented in association with other initiatives for suicide prevention. The guidelines emphasise the importance of engagement of the young person, appropriate assessment, preference for cognitive behavioural interventions, and the possible use of SSRIs for those most severely affected. The dissemination, implementation and evaluation of these guidelines are currently underway.

The use of antidepressant medication in children and adolescents remains controversial. They and their parents are usually reluctant for medications to be prescribed. There have been few studies of the effectiveness of antidepressant medications with children and younger adolescents and this approach is not the first treatment of choice (NHMRC 1997). In contrast, studies with children and adolescents have suggested that cognitive-behavioural and interpersonal psychotherapies are effective treatment approaches (eg Belsher et al 1995, Kahn et al 1990, Lewinsohn et al 1990, Moreau et al 1991, Mufson et al 1994, Reynolds & Coats 1986, Vostinia & Harrington 1994).

While it is recognised that the diagnosis of major depressive disorder or dysthymia is relatively infrequent in childhood, but rises in the adolescent years, there is nevertheless a need to ensure that children who have depressive disorders receive appropriate treatment. The appropriate use of antidepressant drugs in such cases requires further research. Treatment recommendation from the NHMRC guidelines for adolescents suggests that SSRIs are the preferable drugs when antidepressants are necessary. In children with a depressive disorder with melancholic symptoms, such a treatment approach may remain the most effective intervention. For those with heterogenous unipolar depressive disorder, clinicians need to prioritise strategies other than antidepressant medications. This is an issue that requires close consideration and further clarification.

Postnatal depression

About half the women suffering postnatal depression do not have their illness recognised. Recognition is aided by routine inquiry about depressive symptoms and screening using a tool such as the Edinburgh Postnatal Depression Scale, along with heightened vigilance for signs of depression (Boyce 1995).

The key component of treatment will be psychosocial intervention including practical support, counselling, supportive psychotherapy and cognitive behaviour therapy. Some women will benefit from the adjunctive use of an antidepressant medication. The indications for medication include a pattern of melancholic symptoms, concomitant panic disorder and failure of psychosocial interventions. Tricyclic antidepressants, in particular dothiepin, remain the first line of treatment for women who continue to breastfeed (Buist & Janson 1995). The newer antidepressants, specifically the SSRIs, have a lower side-effect profile and may be used by women who are not breastfeeding.

As the depression resolves, an assessment should be made of the developing mother–infant bond, the marital relationship and relationships with other children. It may be necessary to intervene with any persisting relationship difficulties to prevent possible negative outcomes for the children.

In the more severe cases of postnatal depression and in post-partum psychosis, inpatient treatment in a mother and baby unit may be a component of care. Both specialised mental health services and specialised motherhood support services (eg Tresillian and Karitane) can provide care.

Older persons

Many depressive symptoms are 'understandable' in older persons as reactions to the loss of loved ones and previous physical, mental and social capabilities. However, even 'understandable' depressive disorders can be alleviated with treatment (Snowdon 1998). There is a lack of research examining the relative efficacy of different treatments for depression in older persons. At present, appropriate treatment is not substantively different to that for younger adults, although taking into account related environmental and psychosocial factors, is possibly even more imperative. In particular, interventions related to social isolation and physical illness and disability are relevant.

It is also important to separate diagnoses of dementia and depression and to treat both. However, the separation of these disorders is often difficult as they commonly coexist and older people with depression may progress to dementia. Appropriate treatment of older persons requires careful use of antidepressants in order to

monitor possible drug interactions for persons on multiple medications. This may include the use of lower doses, particularly where comorbidity slows the rate of drug metabolism. An antidepressant with minimal cognitive effects should be chosen; the older tricyclics should be avoided as they affect cognitive function (Simon et al 1996). ECT may be the most effective and safe treatment for some older people with resistant or severe depression.

Psychotherapies, improvement of the social environment, good follow-up and rigorous treatment of relapses and recurrences are required (Flint & Rifat 1997). For older people in residential care who suffer from both multiple physical problems and social isolation, the psychological and social factors contributing to their depressed mood need to be sensitively addressed through the provision of an appropriate physical and social environment within the care facility, along with the provision of appropriate clinical care.

4.3 Issues for prevention and management in special population groups

For some sectors of the Australian community there are unique factors affecting the development and delivery of interventions designed to prevent and manage depression. There are a number of significant barriers that apply to Aboriginal peoples and Torres Strait Islanders, to people from culturally and linguistically diverse backgrounds, and rural and remote communities. In general, more flexible, culturally sensitive and outreaching services need to be developed and delivered to people from different cultural backgrounds and remote populations.

Fundamentally, lack of services and lack of choice of services is characteristic of non-metropolitan areas. Issues related to stigma and discrimination are amplified in areas where help-seeking behaviour is very visible due to limited service provision and insular communities.

Cultural insensitivity can interfere with access to services, communication, the development of social and therapeutic relationships, detection and appropriate interpretation of symptoms, as well as the acceptability of interventions offered by health providers. There is little professional understanding of ethnocentric and alternative healing methods, such as the importance of traditional mourning practices.

Aboriginal peoples and Torres Strait Islanders

A history of dispossession and its impact on emotional and social wellbeing has shaped the relationship between mainstream health services and Aboriginal peoples and Torres Strait Islanders. For example, barriers of distrust, misunderstanding and poor communication may impact on many Aboriginal peoples and Torres Strait Islanders seeking out health care from mainstream providers.

The emotional and social wellbeing of Aboriginal peoples and Torres Strait Islanders must be addressed in a holistic way. This approach requires strategies across the continuum of care from prevention, early intervention, and health promotion to clinical care and management. Strategies to address mental health cannot be developed and delivered in isolation from broader health, primary health, and health-related strategies.

There are now around 100 Aboriginal Community Controlled Health Services (ACCHSs) across Australia that provide a primary health care function consistent with the principles of the Ottawa Charter (Swan & Raphael 1995). The peak body for these services is the National Aboriginal Community Controlled Health Organisation (NACCHO). Services provided range from large multi-functional services employing several medical practitioners and other health professionals to smaller services that rely on a few staff to provide the bulk of primary care services. They provide a range of services covering health promotion, prevention, early intervention and treatment. ACCHSs provide holistic primary health care services to the community in a culturally appropriate setting that ensures that most Aboriginal peoples and Torres Strait Islanders have access to appropriate and timely health care.

While it is crucial for Aboriginal peoples and Torres Strait Islanders to have access to culturally appropriate care through Aboriginal community controlled services, equity of access to specialist mental health care programs is also important. Such programs are identified as a major area of need by Aboriginal peoples and Torres Strait Islanders. The adaptation of psychological treatments to be appropriate for Aboriginal peoples and Torres Strait Islanders (and also for people from culturally and linguistically diverse backgrounds) is an issue of particular concern. Current approaches include adaptations of narrative therapy, the development of culturally relevant models, traditional health practices, and psychodrama.

The issues of language and cultural interpretation can have important implications for the quality of primary health care. For example, a non-Indigenous general practitioner may misinterpret information given by Aboriginal peoples and Torres Strait Islanders during assessment. There is a need for appropriate organisational structures to be in place which recognise the legitimate role of Aboriginal and Torres Strait Islander health workers operating in collaboration with general practitioners to deliver a culturally sensitive service.

Critical issues that are inextricably linked to mental health and disorder by Aboriginal peoples and Torres Strait Islanders include the consequences of trauma, grief, loss, and drug-related harm (Swan & Raphael 1995). Clearly, there need to be specific policies to prevent undue trauma and loss for Aboriginal peoples and Torres Strait Islanders and sensitivity to the high background level of trauma and loss that are part of their experience. In particular, intersectoral and health care system interventions must work towards strengthening families and other social systems to prevent family separations, such as placing children into care and juvenile incarceration, which continue to occur.

People from culturally and linguistically diverse backgrounds

The multiplicity of biopsychosocial causal factors for depression in migrants and refugees highlights the need for early interventions for these groups. Collaborative models of service delivery are currently being implemented in each State and Territory for newly arrived refugees. Community–based services are crucial to promoting access and continuity of care.

The choice of strategies for prevention and intervention needs to be based on a comprehensive analysis of causes and increased understanding of the needs of this population. Interventions that include psycho-education, facilitated access to health services, settlement services, counselling services (including short-term

counselling), and availability of qualified interpreters has enabled improvements in the physical and psychological health status of migrants.

Adequate support for children, some of whom have also been directly traumatised, is also important. Newly arrived migrant and refugee children and adolescents require support not only from their parents, but also from an educational system that can actively enhance their sense of belonging and accommodate any special needs that arise. Groups conducted in school settings for refugee children have been found to be beneficial for the participant's wellbeing and teachers have reported benefits. This area of work requires more systematic evaluation.

4.4 Barriers to prevention and management

A national survey of the Australian general public revealed that the views of most respondents regarding treatment differed from those of most clinicians (Jorm et al 1999a). General practitioners and counsellors were rated more highly as sources of help than psychiatrists and psychologists. Many standard psychiatric treatments, such as antidepressants, ECT and admission to a psychiatric ward of a hospital, were more often rated as harmful than helpful, while some non-standard treatments were rated highly (eg increased physical or social activity, relaxation and stress management, and reading about people with similar problems). Even vitamins, herbal remedies and special diets were rated more highly than antidepressants. Such differences of opinion between the public and mental health professionals may lead to unwillingness to seek help or comply with treatment.

There are many plausible reasons behind this mismatch of public and professional views. Fear of stigma and labelling, lack of recognition of depressive symptoms, the view that the depression 'will pass' and that 'it is something to be expected', lack of compliance, and fear of dismissal from significant others are all barriers to treatment. For peoples of Aboriginal or Torres Strait Islander descent, cultural factors and lack of access to appropriate services are major barriers. For peoples from culturally and linguistically diverse backgrounds, cultural differences between service users and services providers are also a paramount problem, as is language.

In general, the public are not informed consumers of mental health care services and are unaware of the choice of interventions that may be available to them to treat depressive symptoms and disorders. They may be unaware of the different types of treatments likely to be offered by a general practitioner, a psychiatrist or a psychologist. The Australian Psychological Society (APS) has recognised this problem and is about to undertake an extensive public education program regarding the roles and skills of psychologists.

Consumer choice of mental health treatment should be a collaborative process agreed to by informed choice between the provider and the consumer. However, while it is necessary to raise consumer awareness regarding choice of interventions, it must be realised that such choice is only availably to those who can afford it. The cost incurred in many treatments is a major barrier. Counselling and most psychological treatments are not available under MBS or health insurance rebates. As psychotherapy related to a depressive risk factor may be a long-term undertaking, the associated costs are prohibitive for many people. Consequently, the burden of care often rests with general practitioners, as their services are most fully covered by rebates. According to the report of the Joint

Consultative Committee in Psychiatry (1997) of the RACGP and RANZCP, while there are many enhanced roles available to general practitioners, and that current initiatives under the National Mental Health Strategy and General Practice Strategy are likely to increase opportunities and impetus for general practitioners' involvement in these areas, such conduct is currently not rewarded in terms of appropriate recognition or remuneration. The time taken to provide the full range of care for a complex depressive disorder is still not adequately reimbursed to the general practitioner.

Barriers to recognition and management of depression and other mental disorders by general practitioners cited in published studies (Phongsavan et al 1995, Carr & Reid 1996, Aoun 1997, Aoun et al 1997, Veit et al 1996) include:

- self-perceived lack of skills in the area;
- time pressure in general practice being too great to undertake a counselling role;
- perceived lack of access to or communication difficulties with specialist mental health services for advice and long waiting lists at tertiary services; and
- feelings of discomfort evident by people accessing mental health services.

Assertive marketing and information dissemination of trials using antidepressant medication by pharmaceutical companies, and the comparative lack of assertive demonstration of the established advantages of non-pharmacological treatments, are increasingly leading psychiatrists and general practitioners to judge that 'all depression' should be treated with medication. This is a trend that needs to be carefully considered and evaluated. It will best be addressed by obtaining a clear evidence base that identifies the treatments that are best suited to specific disorders. Lack of awareness of networks or unwillingness to incorporate referral to other care providers for specific types of treatment, and inability to work within a pluralistic approach are also major potential obstacles.

5 Current initiatives relating to depression

This chapter is designed to provide a glimpse of current activities related to depression across the health care continuum. It should be noted, however, that neither a systematic review nor a comprehensive record of depression initiatives is provided. The level and diversity of activity in this area make a thorough review well beyond the scope of this report. Rather, examples of some of the key initiatives being undertaken across the nation are presented.

Currently, intersectoral linkages, collaborations and partnerships are not only encouraged, they are essential for finite resources to be put to the best possible use for the community as a whole, specific groups and individuals. Furthermore, individuals require a holistic, seamless and comprehensive health care response to their needs. Therefore, although in this chapter the current initiatives are presented by type of health care continuum intervention and also by sector of service delivery, this clearly does not reflect reality as no initiative sits solely within only one area of the health care continuum.

With these limitations in mind, this chapter attempts to acknowledge and inform about some of the initiatives currently under way, and also to highlight the areas where future collaborations can be fostered.

The health care continuum is represented broadly by the following categories:

1. promotion, prevention and community education;
2. early intervention;
3. management and treatment; and
4. evaluation and monitoring.

Within each of these areas, initiatives are divided into the following domains:

- Commonwealth Government

  These are initiatives that are primarily sourced by the Commonwealth Government, although some are located at the State and Territory level and have key stakeholders from other sectors. The Commonwealth Government is also involved in other initiatives that might be included in the non-government organisation (NGO), general practitioner, and other organisation sections.

- State and Territory governments

  These initiatives are primarily sourced by the State and Territory governments, although some have key stakeholders from other sectors. Again, State and Territory governments are also involved in initiatives that otherwise might be included in the NGO, general practitioner, and other organisation sections.

- Non-government organisations

  Consumer, carer, community and charitable organisations (broadly termed NGOs) have a central role in contributing services across the spectrum of the health care continuum. The ability of NGOs to work holistically with individuals and groups, and the significant input from consumers, enables workers to address the whole range of circumstances which impact on a

person's mental health. In all kinds of innovative arrangements, the NGOs work closely with general practitioners, psychiatrists, self-help groups and educational institutions as well as government. While by no means comprehensive, the activities included under this category provide an indication of the variety of work that is being done in this area.

- General practitioners

  As this report has identified, general practitioners play a pivotal role in the management and treatment of depression. The importance of individual general practitioners, Divisions of General Practice, the RACGP, and the Integration Support and Evaluation Resource Unit (ISERU) at the University of New South Wales cannot be underestimated. The general practice initiatives encompasses the entire health care continuum and are evident throughout all sections of this chapter.

- Other activity

  Educational institutions, professional bodies, pharmaceutical industries, and private enterprise contribute considerably to the provision of mental health services to the Australian community. This category gives a broad outline of some of the work that is being either supported or provided by these groups.

5.1 Promotion, prevention and community education

Commonwealth Government

The Second National Mental Health Plan, which was endorsed by Health Ministers in July 1998, has a major focus on mental health promotion, prevention and community education. In this context, a Mental Health Promotion and Prevention Action Plan is currently being developed to summarise opportunities for promotion and prevention initiatives across developmental age groups, priority populations, and adverse life events and settings. The Plan will include nationally agreed strategies relating specifically to depression. A three-year National Depression Action Plan is also being developed to outline strategies across the health care continuum arising out of this current report.

Related policy development initiatives include the National Strategy Against Drug Abuse, which recognises that depression is often a precipitating factor in drug misuse; the National Health Policy for Children and Young People, which recognises that depression, anxiety and the perceived lack of 'connectedness' in childhood and adolescence are predictors of more serious mental health problems or health risk behaviours later in life; and the National Youth Suicide Prevention Strategy, which responds to youth suicide as a public health issue and provides a range of activities to prevent youth suicide in Australia.

The National Strategy for an Ageing Australia will develop a broad-ranging framework to identify challenges and possible responses for government, business, the community, and individuals to meet the needs of Australians as they age. Under the 'healthy ageing' and 'world-class care' themes, it will consider the impacts of ageing, and, in particular, examine the issues of dementia and

depression in older persons. This will enable the government to develop short, medium and long term policy responses to population ageing as part of a coordinated national framework.

Current and proposed public health initiatives that address depression include the National Women's Health Program, which aims to improve the health and wellbeing of Australian women, and The Supportive Care—Psychosocial Aspects of Breast Cancer Program, which will focus on the psychosocial needs of women with breast cancer. There is also the Active Australia initiative, a nationally collaborative venture that aims to increase the level of physical activity in the general population, recognising that moderate levels of physical activity are beneficial for mental health, including depression.

Related to the mental health of Aboriginal peoples and Torres Strait Islanders, the Emotional and Social Well Being (Mental Health) Action Plan has been developed with the objective of enhancing the appropriateness and effectiveness of both mainstream and specialised mental health organisations for Aboriginal peoples and Torres Strait Islanders. The action plan aims to build the capacity of the Aboriginal and Torres Strait Islander community controlled sector to respond to emotional and social wellbeing issues. This approach requires the development of partnerships with broader mainstream mental health services and programs. Under the Plan, Regional Centres have been established to develop and/or deliver educational and training packages addressing emotional and social wellbeing, improve linkages across and between sectors, provide support to Aboriginal and Torres Strait Islander Health Workers, and develop mental health information systems. The Plan was expanded in response to the Bringing Them Home report to include 50 new counselling positions, three additional Regional Centres, and parenting and family wellbeing initiatives.

The Commonwealth funds *Deadly Vibe*, a national monthly magazine aimed at showcasing achievements of young Aboriginal peoples and Torres Trait Islanders by promoting positive images and healthy messages, and sharing cultures, information and news. The *Deadly Sounds* radio program complements the magazine as a weekly Indigenous radio program broadcast nationally on community radio networks, including a number of remote Aboriginal and Torres Strait Islander communities as well as juvenile detention centres.

The Commonwealth Aboriginal and Torres Strait Islander Substance Misuse Program funds approximately 60 programs nationally. These provide Indigenous-specific alcohol and drug education and prevention strategies, and treatment and rehabilitation services in non-custodial facilities within Aboriginal community controlled services. This Program recognises the links between depression and alcohol and drug misuse. A review of the program is underway and will guide future directions in responding to substance misuse in Aboriginal and Torres Strait Islander communities.

A large range of mental health projects have been funded under the former Divisions and Projects Grant Program (DPGP) of the General Practice Strategy, several of promotion and prevention initiatives. One of the major aspirations of the General Practice Strategy, Divisions Program is to encourage general practitioners to play a more active role in prevention and health promotion. Most of these projects either focus specifically on depression or more broadly on mental health.

Clinical Practice Guidelines for Depression in Young People were developed by the NHMRC and released in 1997 (refer Chapter 4 Box 4.2). The practice guidelines include guides for both general practitioners and mental health professionals plus two publications for consumers.

A *What Is Depression?* information pamphlet was developed as part of the National Mental Health Strategy's Community Awareness Program and aims to increase community awareness about mental disorder and reduce the stigma and discrimination experienced by people with a mental disorder, their families and carers.

Two projects to improve the mental health and emotional wellbeing of children and adolescents have been funded under the National Mental Health Strategy and the National Youth Suicide Prevention Strategy. The Mind Matters: National Mental Health in Schools Project aims to provide for a whole-school approach to dealing with mental health issues and for the development and trialling of curriculum materials and staff professional development in 24 pilot schools across Australia. Supporting Families is a national parenting initiative, which includes seven projects that focus on primary prevention and early intervention support for families. These interventions may help reduce the incidence of depression in later in life.

State/Territory governments

Each State and Territory provides parenting programs that aim to improve parenting skills and thereby reduce the risk of children developing mental health problems, including depression, in later life. States and Territories also provide a range of suicide prevention programs that address issues related to depression and suicide. These include programs to increase health providers' awareness of risk factors and warning signs of suicide (including depression), and to increase community knowledge of suicide, including understanding the relationship between depression and suicide. Similarly, States and Territories are providing programs to improve the resilience and coping skills of young people that may prevent the development of depression in later life.

New South Wales

A State-wide program, the School-Based Education and Prevention Program for Depression in Young People is a collaborative venture conducted by the NSW Centre for Mental Health, the NSW Department of Education and Training and the Area Health Services. The program aims to improve the understanding, recognition, management and prevention of depression in state secondary schools. Similarly, the Dumping Depression project in the Central Coast Area aims to increase awareness of depression in young people.

The Development and Evaluation of an Interactive Computer Program about Depression in Young People is an education/information project in the Hunter Area that uses a computer program to inform young people about depression and direct them to sources of further information.

The Depression in Young People—NSW Interest Group is made up of mental heath professionals with the aim of supporting and fostering the development of depression intervention projects.

The Prevention of Postnatal Distress project is evaluating two preventive programs for postnatal distress in first-time parents.

Victoria

Programs for young people include the Gatehouse—Links with an Area Mental Health Service project, which provides a model for developing linkages between schools and Area Mental Health Services. The Gatehouse project aims to prevent depressive symptoms in early adolescence, and thereby prevent or delay the onset of major depression. This project is researching interventions at three levels of the classroom curriculum, the classroom social climate, and the whole-school social climate.

Queensland

Strategic planning is currently under way to address the requirements of the Second National Mental Health Plan. The focus in Queensland is on maintaining priority areas and progressing state-wide and district transition plans particularly in the areas of risk management, outcome measurement, consumer participation and professional development. Increasing the number of clinical pathways, particularly to strengthen the continuity of care across acute and mental health inpatient services and return to the community, and targeting strategies to improve consumer participation, are particular emphases. The Ten Year Mental Health Strategy for Queensland (1996) provides the framework for mental health service development and aims to promote quality and continuity of care through improved intersectoral linkages.

The Queensland Government Youth Suicide Prevention Strategy aims to prevent youth suicide, reduce the impact of suicide on families and communities, and enhance the quality of life for young people in Queensland through a range of suicide prevention, early intervention, intervention and treatment approaches. The major initiative is the development of local networks across Queensland to build targeted and sustainable responses to improving young people's mental health and wellbeing and appropriate responses to self-harming and suicidal behaviour.

The development and implementation of the Youth Suicide Prevention Strategy is assisted by the Young People at Risk established in 1995. This program aims to prevent suicidal and self-harming behaviours among young people aged 10–24 years through the provision of training, education and dissemination of best practice resources in the area of youth suicide prevention.

The Queensland School Nurse Program will place school nurses in state government secondary schools to address mental health and other issues of concern for young people through a preventive primary health focus for assessment, care and referral.

South Australia

Many services and programs are directed at young people. These include the Child and Adolescent Mental Health Services (Southern and Northern) link with the local communities through schools and local authorities to promote positive mental health awareness. School support liaison services are provided in both country and metropolitan areas. Adolescent Day Services at Enfield provide mental health promotion activities and forums with young people. The Southern CHAMPS project embraces the principles of youth partnership accountability. The Partnerships with

Young People project increases the community's capacity to promote mental health by encouraging young people to engage in such activities as producing web site chat rooms and promotion material, and giving presentations to schools. The Second Storey Child and Youth Health Peer Support Projects provides support for young people by young people.

Mental health promotion is provided specifically for Aboriginal persons through Bridging the Gap and Aboriginal Mental Health—Port Augusta.

Information on mental health, and other issues for parents, is contained in *Parenting Easy Guides* put out by the Office for Families and Children.

Western Australia

The Aussie Optimism Program is a research collaboration between Curtin University of Technology and the Health and Education Departments. It is a school-based depression prevention program for rural children aged 10–13 years, which is being piloted in rural communities from Geraldton to Albany. All year 5, 6 and 7 students are screened for symptoms of depression. School psychologists, school and community nurses and community health psychologists have been trained to provide the program. Children who participate in the program are being followed-up over two years, and levels of depression and optimism will be compared with a control group who have not undertaken the program. Data from two controlled pilot studies conducted in two urban schools in 1996, with six-month follow ups in 1997, indicate that the program has been successful in reducing depression and increasing self-esteem in children in the prevention groups compared to children in the control groups.

The RAP is being trialled as a universal program with year 8 classes in Merredin and Kalgoorlie. School staff and school psychologists have been trained to present the program, with the goal of embedding RAP within the future school curriculum. The trial involves collaboration between the Education Department of WA, the Health Department of WA, Curtin University of Technology and Griffith University, and is funded by the Health Department of Western Australia.

Ymag is a youth-oriented magazine started by the Health Department in 1998 and distributed widely throughout Western Australia. It provides information about a range of mental health issues and conditions including depression, suicide and stress. *Ymag* has been distributed widely throughout Western Australia.

Western Australian youth suicide prevention strategies include gatekeeper training for a variety of professionals who work with young people. The training covers indicators of suicide risk and how to support suicidal young people. A project to train additional trainers funded under the National Youth Suicide Prevention Strategy is nearing completion and has included the development of extensive training materials. Training has also been provided to general practitioners under a nationally funded project. The Office of Youth Affairs has prepared information for the community about youth suicide and its prevention. Information for parents is currently being developed with funding from the National Strategy.

The Western Australian Government has recently endorsed an Aboriginal youth suicide prevention policy and program. This will ensure that existing strategies are appropriately adapted to meet the needs of Aboriginal young people and their communities, as well as develop a range of specific prevention strategies.

The Childbirth Stress and Depression Project has resulted in initiatives to address a range of major difficulties and problems that had been identified by both health consumers and health professionals in the area of childbirth and mental health. These include training workshops for health professionals, community information sessions, the formation of a Postnatal Depression Support Association, and the provision of information packages to all women who gave birth in Western Australia during 1997.

Tasmania

Community education about depression takes place through a variety of forums. Mental Health Service workers regularly give addresses to various groups. The magazine *Open Mind*, produced by the Tasmanian Association for Mental Health, is circulated widely. The Tasmanian Consumers Advisory Group (TasCAG) provides information to carers and consumers on depression.

Australian Capital Territory

In October 1998, the Department of Health and Community Care released the document *The Future of Mental Health Services in the Australian Capital Territory, Moving Towards 2000 and Beyond: A Whole of Territory Strategic Plan.* The plan provides opportunities for the promotion and prevention of mental disorders, including depression.

Healthpact provides resources and leadership for the promotion of good health in the ACT community. The plan, *Promoting Wellbeing in the Community: A Healthpact Strategy 1998–2000,* will guide activities for the program for the next three years. The emphasis is on a 'whole population' approach to the promotion of mental health and wellbeing. Identified in the plan are strategies that encourage partnerships between organisations that promote mental health and wellbeing to prevent, where possible, mental health problems from occurring.

The Department of Health and Community Care has developed the first ACT Youth Suicide Prevention Strategy, which should be finalised by the end of 1998. The strategy focuses on building and maintaining partnerships between organisations in order to maximise their effectiveness for preventing youth suicide.

The Child, Family and Youth Health Program provides services for families with postnatal depression in a range of settings and aims to increase awareness of postnatal depression in the community, particularly for health professionals, families with young children, and individuals within the target group.

Northern Territory

A five-year strategic plan for mental health services in the Northern Territory is currently under development. Specific initiatives aimed at depression will be considered under this plan.

Non-government organisations

Kids Help Line has advocated to promote awareness of depression in young people through a media release and over 80 print and electronic media interviews intended to promote interest in activities to enhance resilience in young people.

Kids Help Line runs Being There peer skills workshops for young people across Australia. These workshops focus on the development of a range of social and personal skills that improve the personal competence of young people.

Mental Illness Education Australia (MIEA) is a non-government national organisation that aims to promote greater understanding of mental health issues, particularly among young people, their teachers, school counsellors and the wider community. MIEA includes depression as an important part of their classroom presentations.

Another national association, ANAMH, the Australian National Association for Mental Health used the National Mental Health Week 1998 as a vehicle to educate the public about depression. As well as a broad range of promotional activities, a seminar on depression for the Greek community was held in Melbourne.

The Depression and Mood Disorders Association of New South Wales has a number of groups operating in the Sydney area and publishes a newsletter, *MANDA*.

In an innovative approach to Aboriginal and Torres Strait Islander youth suicide prevention, the Commonwealth has provided seed funding from the National Youth Suicide Prevention Strategy for the LUMBU Foundation, the Foundation for Aboriginal and Torres Strait Islander Families and Young People. The Foundation will focus on reducing self-harming behaviours among Aboriginal and Torres Strait Islander young people by providing small grants to support local community activities aimed at building the self-esteem of young people, strengthening families and promoting healthy lifestyles.

The Australian Transcultural Mental Health Network has been funded by the Commonwealth to promote the quality and accessibility of services to meet the mental health needs of people from culturally and linguistically diverse backgrounds. Its aims have been mental health promotion, the establishment of an information service, professional and community education, and research.

PaNDa (Post & AnteNatal Depression Association) is one of many organisations that provide a service to women suffering from postnatal depression and their families. PaNDa is a Victoria based organisation that provides two broad services. It supports women and their families suffering from postnatal mood disorders and also educates professionals and the wider community about postnatal depression and its effects. By raising awareness of postnatal depression among the general community and health professions, and by providing support and information to those affected, PaNDa aims to reduce the trauma that postnatal depression creates for thousands of families in Australia each year.

Providing a specific service for carers, the Carers Association in the ACT, through its Community Education and Development Unit, works with at-risk groups, such as young carers, carers of people with mental illness, and carers of people from a non-English speaking background. In all States and Territories, the Association for Relatives and Friends of the Mentally Ill (ARAFMI) offers support for carers of people with depression. The 'Offspring' group, convened by ARAFMI in Victoria, is specifically for older adolescents and young adults who have a parent/s with mental illness. In Victoria, the National Network of Adult and Adolescent children who have Mentally Ill parent/s Vic. (NNAAMI) is a self-help group that provides mutual aid and support to its members.

SANE Australia is a national charity that helps people seriously affected by mental disorder through applied research; development of resources for consumers, carers and professionals; and campaigning for improved services and attitudes. As such, SANE's work is not diagnosis-specific, but involves many initiatives that relate to depression. *SANE Factsheets* are one-page information sheets that can be downloaded from the Internet or purchased as a master set for photocopying. These are available in a range of topics, including depression and bipolar disorder. Additionally, the SANE video kits, *Rockets and Rollerblades* for consumers and *Snapshots and Signposts* for carers, outline strategies for combating depression.

The Australia-wide GROW mutual help groups movement (over 400 groups in Australia) provides assistance to people suffering from depression through its structured group method, educational program and social networking supports. In particular, the shared learning in the GROW groups and the building of a community of friendship addresses the self-isolating characteristic of depression.

General practitioners

The work of general practitioners contributes to promotion and prevention activities in many ways, but particularly through relationship counselling, bereavement interventions, obstetric shared-care support for new mothers, as well as opportunistic screening for alcohol and other drug misuse and the existence of other risk factors for depression.

The ACT Division of General Practice is planning to conduct a six-month pilot Healthy Ageing program in collaboration with ACT Community Care. The program's objectives include the promotion of a screening tool for use in general practice to diagnose depression, and the enhancement of community awareness about depression and its associated risk factors. Following the initial pilot phase, the program will be extended to all general practitioners with the aim of having a sustainable program operating after the year 2000.

Examples of other activities

The Department of Psychology at the University of Queensland, with NHMRC funding, is undertaking the Problem Solving for Life Project aimed at providing a controlled outcome evaluation of the effectiveness of a problem-solving program in preventing the onset of depression in adolescents. The intervention involves the delivery, by teachers, of a universal prevention program aimed at all year 8 students. Eight weekly sessions are designed to fit within the regular school curriculum over one school term. Students are trained in adaptive thinking styles, positive problem orientation, and problem-solving skills.

Research funded by Wesfarmers examines depression prevention in rural women. Seventy-six rural women with depressive symptoms and therefore at risk for depression were randomly assigned to either traditional CBT, an intervention based on learned helplessness theory and interpersonal psychotherapy, or a no-treatment control group. Both treatments produced significant changes in depression and hopelessness, but only the treatment based on learned helplessness theory resulted in maintenance at six-month follow-up.

5.2 Early intervention

Commonwealth Government

Specific early intervention initiatives under the National Mental Health Strategy include the Griffith Early Intervention Program, which incorporates a school-based approach to early identification and intervention for anxiety and depression. The program has developed a national network and resource materials for young people aged 6–16 years with anxiety and depression symptoms. This included the development of the RAP, a school-based depression prevention program, promoting mental health and resilience in young people.

AusEinet, the Australian Early Intervention Network for Mental Health in Children and Young People has been funded under the National Mental Health Strategy and the Youth Suicide Prevention Strategy to promote early intervention in mental health problems specifically for children and adolescents. The project has three interrelated streams. Stream 1 focuses on the development of a national communications network around early intervention. Stream 2 is concerned with the reorientation of services to early intervention by placing mental health workers in selected agencies throughout Australia. Stream 3 aims to identify and promote best practice in early intervention for specific disorders. An external evaluation of the project is due to be completed in mid 1999.

Under the National Youth Suicide Prevention Strategy there are seven projects funded aimed at informing good practice in the development of hospital and health service protocols for young people presenting as suicidal. This target group includes depressed people and the evaluation results will be available in late 1999.

Under the Aboriginal and Torres Strait Islander Emotional and Social Well Being (Mental Health) Action Plan, early intervention initiatives include facilitating the development of a range of culturally appropriate mental health care models, and 50 new positions for trained Indigenous counsellors located primarily in community controlled services.

The Early Intervention Program for Humanitarian and Refugee Entrants, funded under the Commonwealth's Integrated Humanitarian Settlement Strategy, is directed at people exposed to traumatic circumstances, extensive loss and poor living conditions in their country of origin, and who face adjustment to a new culture. The program comprises multiple interventions to enhance mental wellbeing and alleviate anxiety symptoms, PTSD and depressive symptoms. Community-based services work collaboratively, referring to specialist health services when necessary.

Another Commonwealth program is the Program of Assistance for Survivors of Torture and Trauma, which provides funding for services for survivors of torture and trauma in each State and Territory. Under this program, services are aimed at people with multiple and complex needs requiring long-term interventions.

State/Territory governments

New South Wales

A pilot study undertaken in the Northern Sydney area, A Targeted Depression Prevention Program in Schools, is the first program in NSW to employ targeted intervention for depressive symptoms in schools. The study involves screening all year 9 students for depressive symptoms, with those identified offered an intervention.

In the Central Coast area, the Early Intervention for Depression project is developing best practice guidelines for early identification, presentation and intervention for depression in young people.

Examples of early intervention/prevention programs for depression in adults are the Early Intervention in Depression and Anxiety program, which provides access to psychological services for people with depression and anxiety who present to general practitioners, and the Specialist GP Liaison Project, which incorporates collaboration with specialist general practitioners to facilitate the early identification of depressive symptoms. The Best Practice in Non-Major Adult Depression project aims to support at risk adults within southern NSW by increasing community awareness of adult depression, improving the knowledge and skills of primary health care and mental health workers, and providing prevention and management services.

Programs that assist in the early identification of postnatal depression include the Post Natal Training Program in the New England area, which provides training for mental health staff in the recognition and effective treatment of postnatal depression. The General Practitioner Education and Training in Postnatal Mood Disorders program aims to educate and train general practitioners in the identification, management and treatment of postnatal depression.

The detection and early intervention of depression in older people is the focus of a number of projects. The Aged Care Mental Health project in the central coast area aims to improve the recognition and appropriate management of depression in older persons, and involves seconding a mental heath worker to aged care services. In the Hunter Valley area, a mental health worker has been employed to work in conjunction with established services to examine and prevent suicidal behaviour in older people, including at-risk groups, such as depressed persons. The Depression in Older People project is a multi-sectoral approach to determine the incidence of depression in older people in the New England area.

Projects to assist people from culturally and linguistically diverse backgrounds include a project to promote early identification and intervention for depression among the Vietnamese community being conducted by the Liverpool Health Service. The Central Sydney Area Health Service is supporting Unrecognised and Untreated Depression: the Impact of Having Poor English *or* Communication Skills. There are also two projects related to postnatal depression, Chinese Postnatal Distress and Screening for Postnatal Depression in Non-English Speaking Women. The NSW Transcultural Mental Health Centre has promoted and facilitated the education of mental health professionals in transcultural mental health through developing a course for counsellors.

Victoria

The Victorian Department of Human Services has requested tenders for two action-based research projects examining barriers to health and welfare services, for men aged 50 years and over and for men aged between 16–25 years.

The Victorian Department of Human Services also funds the Victorian Foundation for Survivors of Torture to provide medium- to long-term interventions for survivors of torture and trauma. Referrals include people identified through the early intervention program funded by the Commonwealth. In addition, under the Youth Suicide Prevention Strategy, early intervention and long-term treatment is provided for adolescent survivors of torture and trauma. For adults, adolescents and children, a wide range of risk and protective factors are addressed. These include physical health, trauma, social support, settlement demands and bereavement. An important part of the service is the training of other service providers to be appropriately responsive to the needs of a traumatised population. Each of the States and Territories operates a similar service, funded in part by the State/Territory.

The Ethnic Mental Health Consultants Program, supported by the Victorian Mental Health Branch for a period of three years, provides for ethnic mental health workers in each of the health care networks in the metropolitan area of Victoria. The role of these consultants is to increase the accessibility of public mental health services for people from culturally and linguistically diverse backgrounds, develop and implement strategic plans for the provision of culturally sensitive mental health services, establish partnerships that better integrate services in the mental health service sector, and support the development of culturally sensitive practice.

The Victorian Transcultural Psychiatric Unit has established and operated a postgraduate diploma in transcultural mental health services.

Queensland

A range of early intervention strategies and activities are being undertaken in Queensland. Queensland Health is developing a Mental Health Outcome Plan for depression, which will include identified priorities and evidence-based strategies for responding to depression in the community. There is also an Ethnic Community Mental Health Program, mental health programs aimed at Aboriginal peoples and Torres Strait Islanders, and targeted programs in child and youth mental health services for at risk populations as defined in the Child and Youth Mental Health Policy.

South Australia

The Early Detection of Emotional Disorders project screens high school students to identify those most at risk of developing an emotional disorder, including depression, and then provides intervention/treatment for these students.

Western Australia

Western Australian youth suicide prevention strategies provide several early intervention approaches. These include: social workers based in emergency departments of major teaching hospitals who ensure that young people treated for deliberate self-harm and attempted suicide receive appropriate assessment and follow-up care; suicide intervention officers within several mental health services who provide support to people identified to be at risk of suicide; and protocols in

senior high schools throughout the State to reduce the likelihood of imitative suicidal behaviour following the suicide of a student. There are also several interagency networks that have formed to assist vulnerable youth following the suicide of a peer.

Tasmania

The Child and Adolescent Mental Health Service (CAMHS) provides a range of early intervention services, including the Triple P Positive Parenting Program. A worker has also been appointed on the North West Coast under the AusIEnet program, to assist development of services for young people, and a survey of young people will be held in late 1998 to assess attitudes towards mental health services.

Australian Capital Territory

The Child, Family and Youth Health Program is conducting a project to increase awareness of postnatal depression in the community. In partnership with medical officers, the project provides early identification and treatment of postnatal depression and depression in families.

Northern Territory

Mental Health Services on the Tiwi Islands are working with Charles Sturt University and the Community Council to develop culturally appropriate strategies and protocols to prevent youth suicide. The early detection of depression, in its various cultural contexts and manifestations, is one of the main aims of this project.

A Child, Family and Youth Health Program is also funded with the aim of increasing awareness of postnatal depression in the community, thus ensuring early identification and intervention. The project also offers assessment and treatment of postnatal depression in partnership with medical practitioners.

Non-government organisations

Kids Help Line logs over 400,000 problem-related calls from children and young people all over Australia each year. Broad-based training ensures that all counsellors are aware of the importance of early intervention and the symptoms that suggest referral. Specific training relates to depressive symptoms, suicide prevention, self-harm and eating disorders.

The Carers Association of Australia advocates for the needs of carers of the frail aged and people with illnesses and disabilities, including those with mental disorders. The Association also recognises that family carers are a group at risk of developing depression, especially when the care provided is long-term and intensive or due to marked changes in the care recipient.

General practitioners

Many Divisional activities focus on improving working relationships with other mental health service providers to ensure that people with depression can access required services across the health care continuum. Many general practitioners are also undertaking structured programs to obtain skills in the early identification, management and treatment of depression. Other activities include:

- screening young people for suicide ideation and risk;

- postnatal depression screening and intervention;
- support groups for new parents at risk; and
- depression screening in elderly persons.

The Western Division of General Practitioners has funded the Victorian Foundation for Survivors of Torture to produce a manual for general practitioners, supported by a four-session training program, to enable general practitioners to assess and effectively treat physical and mental health problems presenting in the refugee population.

Examples of other activities

The Department of Psychological Medicine at the University of Sydney has three major initiatives in depression: a screening program for postnatal depression; a prophylaxis for postnatal depression (information for midwives about the risk of postnatal depression); and the education of general practitioners to improve their ability to recognise and treat depression. The Graduate Medical Program also has sessions on the recognition and management of depression in all medical settings and across the lifespan.

The Centre for Health Equity Training Research and Evaluation has initiated the Unemployment and Health Project in South Western Sydney over the past five years to address the health-related problems of unemployment. The project claims to have demonstrated that it is possible for the health sector to respond to the health needs of people who are unemployed through better service provision, increasing the capacity of individuals and communities, and policy development.

5.3 Management and treatment

Commonwealth Government

General practitioners provide a greater proportion of mental health care than any other health professionals. Shared-care arrangements with mental health professionals make it possible for general practitioners to care for more people who are severely disabled by mental health problems and disorders, including depression. Many projects employing shared-care models have been funded under the former DPGP of the General Practice Strategy. Whereas some of these projects have emphasised the management of depression, most have included depression within a broader focus on mental health care needs. Approximately two-thirds of Divisions of General Practice conducted mental health interventions of various kinds between 1992 and 1998.

In addition, a number of Psychiatry Pilot Projects are being funded under the National Mental Health Strategy to investigate ways of improving access to psychiatrists and overcoming current sub-optimal distributions between States and Territories, the public and private sectors, sub specialities, and geographic areas within States and Territories. Most of the models being trialled involve cooperative, shared-care activities between general practitioners and psychiatrists or other mental health professionals. Six pilot projects are currently under way, targeting a range of community groups including adults, older people, children, and Aboriginal peoples and Torres Strait Islanders.

Building on the experience of these pilots, demonstration projects are being established to investigate integrated service models. The basic model is for public sector mental health services and private psychiatrists to work together in providing integrated services. However, there is also the capacity to expand the model to include local general practitioners. The treatment focus of both the psychiatry pilots and the integrated service trials is on mental health problems, including depression.

The Care Net Illawarra Co-ordinated Care Trial has identified that one-third of the trial population are suffering from depression. As a result, all general practitioners participating in the trial are attending a cognitive behavioural training program. A volunteer program for participants suffering from depression is also being developed. Dealing with depression is considered to be an important part of the care planning aspect of coordinated care, since it may have a strong relationship with emergency hospital admission, as well as ongoing need for a high level of other services.

Under the National Youth Suicide Prevention Strategy, the Out of the Blues program has been offered through the Mood Disorders Unit at Southern CAMHS Flinders Medical Centre, South Australia with the goal of reducing the incidence of suicidal behaviours and suicide in young people through the treatment of affective disorder. In order to develop best practice service delivery models, the project is trialling and evaluating specific psychotherapeutic techniques, and intensive case management for young people diagnosed with affective disorders.

The Depression in the Elderly: A Shared Care Model of Management evaluated the use of a collaborative, shared-care intervention for the assessment and management of depression amongst older persons in residential care. The intervention consisted of removing barriers to care, carer education, health promotion programs, and health education to de-stigmatise depression. Overall, the intervention was found to be effective and also had positive outcomes in practical terms for the large retirement village under study. The project was funded by the Commonwealth's Aged Care Support Program and General Practice Evaluation Program, the University of Sydney, the NSW Health Department, and the NSW Institute of Psychiatry Research Grant.

Under the National Mental Health Strategy, the Royal Australian and New Zealand College of Psychiatrists (RANZCP) are developing clinical practice guidelines for clinical care pathways in mental health services. Guidelines will be developed in the five areas of major depression, bipolar disorder, schizophrenia, panic disorder and agoraphobia, and anorexia nervosa. A scoping study has been conducted as a first stage of developing clinical care pathways for mental health services in Australia, which could also have applications in New Zealand.

The Commonwealth funds CRS Australia (formerly the Commonwealth Rehabilitation Service) to provide rehabilitation services to help people with physical, psychiatric, intellectual or sensory disabilities to obtain or maintain employment. CRS Australia provides individual and group vocational rehabilitation programs for people who have a depressive condition (as well as other conditions) that is affecting their ability to gain or maintain employment or to live independently in the community. This includes people with depressive conditions associated with unemployment and adjustment to disability.

The Drug Utilisation Sub-Committee of the Pharmaceutical Benefits Advisory Committee and the Pharmaceutical Manufacture's Association are jointly undertaking a study to examine the use of antidepressant drugs in the Australian community in the 1990s.

State/Territory governments

New South Wales

Specifically for young people, implementation of the *NHMRC Guidelines for Depression in Young People* in the mid-western area aims to facilitate the identification of young people with depression and ensure that effective intervention and treatments are provided. The Changeways Program in Wahroonga aims to provide an accessible treatment for young people with depression through an outpatient CBT program.

Beating the Blues is a six-week program to help people develop cognitive behaviour skills to apply in their daily lives with a view to reducing the levels of depression. The Macarthur Mental Health Service provides a depression clinic that delivers CBT to adults with major depression.

There are numerous treatment programs throughout NSW to assist women suffering from postnatal depression. These include the Post Natal Depression Support Group in the mid-North Coast area, which provides a treatment group for sufferers of postnatal depression; and the Parent–Infant Interaction in Depressed Parents, which aims to improve parent–infant interaction skills in parents where the mother has been identified as depressed. There are also a number of postnatal support groups provided by area health services.

Initiatives occurring in the area of treatment for depression in the elderly include the Healthy Aging Depression Therapy Program, which provides a holistic treatment program for older people with depression. Latelife Depression is developing a system of care that maximises early detection of depression in older people and aims to standardise assessment, intervention and follow-up utilising a multidisciplinary team. Nursing Clinics for Depression provide a regular service to residents and staff of nursing homes and hostels regarding the management of depressed persons in these settings.

Research is currently being undertaken by a team from the Community Health Services and Programs, Eastern Area Health Service into the prevalence of depression and psychosis (delusions and hallucinations) in cognitively impaired residents of nursing homes. Guidelines will be formulated for diagnosing and managing psychiatric comorbidity in nursing home residents, and two intervention strategies for the management of depression, psychosis and associated behavioural problems will be evaluated.

There are a number of support group approaches to assist with depression. Blues Busters provides a support group approach to managing depressive thoughts. Overcoming Depression is an eight-week program that aims to improve the mental health of people with depression. The Depression Support Group, in Mudgee, aims to foster a social support network and develop management skills to assist with depression.

Victoria

The Victorian Department of Human Services is commissioning action-based research into innovative treatments of depression in adolescents aged between 12–18 years. The focus is to incorporate the use of mainstream clinical services within an integrated multi-agency service delivery model. One project will be located in a rural region, and another in a metropolitan area. The requirement for a multi-system framework as a service context for the implementation of these projects is directed at enhancing models of collaboration, as well as providing treatment and service delivery suitable to young people diagnosed with clinical depression. The projects are designed to actively encourage and develop linkages between child and adolescent mental health services, welfare services and other agencies through cooperative inter-service arrangements, better treatment programs tailored to individual needs, shared training and professional development activities, strengthening staff exchanges, and widely disseminating knowledge regarding best practice.

For youth in rural settings the Pilot Research into Innovative Treatment for Depression in Adolescents in a Rural Setting aims to access depressed adolescents by screening through a multi-agency model and providing treatment wherever the agency is situated. The agencies involved include CAMHS, schools, Youth Accommodation and Support Services, Protective Services and drug and alcohol services.

Victorian specialist mother–baby services provide consultation and support to area mental health services to enable them to deliver effective treatment and care to women with postnatal disorders, including depression. The mother–baby services also provide consultation and support to other service providers including general practitioners, private psychiatrists, maternal and child health services, and others involved in the postnatal care of mothers and their babies.

The Hormone Replacement Therapy—A New Approach to Treatment Resistant Depression in Post-menopausal Women is a collaborative approach between private psychiatrists and the Dandenong Area Mental Health Service and aims to study the effect of HRT for treatment-resistant depression in post-menopausal women.

The Elders Mood Disorders Clinic at the St George's Hospital Academic Unit for Psychiatry of Old Age commenced in March 1998 and is the only mood disorder clinic specifically for older persons. The clinic utilises a shared-care approach with general practitioners, offering assessment, diagnosis and treatment as well as ongoing education and training.

The Community Aged Depression Education Therapy program, undertaken by the Aged Persons Psychiatric Service, Bendigo Healthcare Group, aims to reduce the level of depression and anxiety and improve coping skills in older people. The group offers support plus education on management and prevention. There is also a support and rehabilitation group conducted in the Shepparton area, which provides peer support and rehabilitation for clients with long-term depression.

The effective administration of ECT for the treatment of depression is being researched by the Grampians Psychiatric Services with the aim of ensuring the optimal administration of ECT. The University of Melbourne is also undertaking research into the effectiveness, rate of relapse, and cognitive effects of unilateral and bilateral ECT.

Queensland

To promote the management and treatment of depression, general practitioners and youth sector services throughout Queensland have been provided with the *NHMRC Clinical Guidelines for Depression in Young People*. A Depression and Anxiety Group, which uses CBT and psycho-education in the treatment of depression and anxiety, and a CBT Depression Management Program to educate clients in strategies for coping with depression, are also underway.

Specifically to address the needs of physically ill people in hospital with depression, the Consultation Liaison Psychiatry: Detection of and Early Intervention for Depression in the General Hospital project is being conducted at three hospital sites in Brisbane.

A project that aims to reduce the incidence of depression related to grieving is being conducted by the Loss and Grief Unit at the Centre for Primary Health Care.

The Wu Chopperen Social Health Program provides support and counselling to Aboriginal peoples and Torres Strait Islanders for a wide range of social and emotional issues, including depression. As well as providing practical welfare assistance to alleviate some of the stressors in people's lives, specific counselling (based on narrative therapy) addresses the associated emotional distress. It has been found that with ongoing support, individual clients have gained significant improvements to their health and wellbeing. In particular, they are able to control the extent to which depression and other emotional problems dominate their lives.

Project 300 is a joint initiative of Queensland Health, the Queensland Department of Public Works and Housing and the non-government community sector in Queensland. It is a three-year plan that aims to provide 900 people in the three major long-stay psychiatric hospitals in Queensland with the opportunity to live independently in the community. A significant component of the model is the collaborative teamwork of the three stakeholders—community mental health services, disability support agencies, and the host agencies (the latter two are non-government organisations). Key workers employed through the host agencies purchase various types of disability support services individually tailored to client need. Independence from direct support services for the key workers enables clients to change or employ new support agencies and increase or decrease their level of support.

South Australia

A 12-month Women and Depression Project, managed by Women's Health Statewide Community Health Service, aims to develop an alternative to existing medical models of service delivery for women experiencing the effects of depression. The effectiveness of this service in a variety of health care settings was evaluated along with its potential for adaptation to mainstream health services. The project also aimed to give service providers in mental health, community health and women's health the experience of working holistically with women experiencing severe and long-term mental illness.

The Mothers and Babies Service focuses on women who are vulnerable to depression in both the antenatal and postnatal periods. Helen Mayo House is a state-funded service that assists women experiencing postnatal depression in a setting where they are able to remain with their children.

There are a number of initiatives to deal with the depression and grief, trauma and loss experienced by Aboriginal people, particularly those who are part of the generation of stolen children. These include narrative therapy and a centre for grief and healing. Another specialist focus is provided through Rosemary Wanganeen's Therapy, which is available to Aboriginal people who are able to access services at their healing centre.

Western Australia

All public and private mental health services treat and manage depression. Public mental health services have been significantly expanded over the past three years and services are now more accessible for all people in the community.

The Health Department also purchases postnatal depression services delivered through women's and community health services in close liaison with local mental health teams. Planning is currently occurring to expand these services.

Tasmania

The Tasmanian Mental Health Service Strategic Plan for the next three years is being prepared and will contain strategies for depression.

Currently, management and treatment of depression is a major focus of the services provided by adult acute services and a range of other services, in both the public and private domains. Services for women experiencing postnatal depression are also provided. An initial data analysis shows that people with depression used 25 per cent of all inpatient bed days for 1997. A reference group has been established between Mental Health Services and Divisions of General Practice. This will examine various models for partnerships, and will foster adoption of the *SPHERE* program of education for general practitioners on the identification and management of depression.

Australian Capital Territory

One of the specific aims within the Calvary Hospital Psychiatric Unit Generalist Program is to assist people to manage depression without a hospital admission. The program includes training in stress management, assertiveness, self-awareness and involvement in the community, along with the provision of family support.

Calvary Hospital also provides a cognitively based program, Overcoming Depression, which explores the use of cognitive strategies to manage depressive symptoms and enhance quality of life.

The Postnatal Depression Project, being conducted by the ACT Mental Health Service, is developing a coordinated model of postnatal depression services in collaboration with other agencies. The project is aiming to ensure that services provided are accessible, integrated, coordinated and consumer focused and that the model of care supports prevention, early detection and appropriate treatment for postnatal depression.

Northern Territory

The Aboriginal Mental Health Worker Program, where western and traditional approaches are utilised in a two-way approach, provides a culturally appropriate and effective intervention in the assessment and treatment of a wide range of mental illnesses and mental health problems, including depression.

The Darwin Urban Mental Health Services provide an inpatient Mothers and Babies treatment program to assist women suffering from postnatal depression.

As part of the implementation of the Northern Territory's new mental health legislation, all procedures and protocols relating to ECT for the treatment of depression (and other conditions) have been reviewed and revised to ensure that they reflect best clinical practice and nationally accepted standards.

Non-government organisations

The Queensland Association for Mental Health auspices a number of smaller self-help groups and conducts recovery programs for mental health workers with the aim of demonstrating strategies of hope and self-reliance in people with long-term serious mental illness.

SANE Australia has undertaken the Blueprint Project, which has researched and developed a series of guides to good practice in the community care of people seriously affected by mental disorders. The SmokeFree Project was developed especially to help people with a mental disorder quit or reduce smoking. Depression may be a major factor in smoking and a feature of this program is helping people deal with depressive symptoms that may arise during an attempt to give up smoking. The SANE Mental Illness Helpline is a national freecall number to provide consumers and carers with information regarding mental disorders, including depression.

General practitioners

The most common way of managing depression in general practice is within general mental health shared-care programs, continuing medical education activities and within depression and anxiety interventions. Specific programs in depression encompass depression in all population groups, postnatal depression, and depression in older persons.

The detection and management of depression by general practitioners is the priority area of the ISERU. The ISERU has formulated a number of ventures, such as the development of a National Divisions Depression Program, a preliminary report titled *What Divisions are Doing about Depression*, the dissemination and evaluation of general practitioners' uptake of the *NHMRC Clinical Guidelines on Depression in Young People*, and an ongoing role for the National Mental Health Network of ISERU. The ISERU has an advisory role on all aspects of standards, quality monitoring and effectiveness and evaluation.

The National Divisions Youth Alliance has developed a network of interested stakeholders in youth health from the Divisions sector. The group has formed in conjunction with the Adolescent Health Network of Access (Support and Evaluation Resource Unit and is currently formalising a National Committee for the development of a youth health website. This will be operationalised on the existing National General Practitioner network at www.gpnetwork.net.au/divyouth.

Other examples of Divisional work include: adopting and coordinating Division-wide use of the SPHERE Depression and Anxiety Treatment Package for General Practitioners; developing local clinical guidelines for primary care of depression;

after-hours management of psychiatric emergency and suicide risk; shared care protocol development for psychiatric emergency support to general practitioners; post-discharge planning for suicide attempts and depression-related admissions: and general practitioner-developed family and carer interventions for those caring for people with depression.

SPHERE is a depression project that was launched nationally at the Austin Hospital in Melbourne in February 1998. The national secretariat of the program includes representatives from each of the Departments of Psychiatry from medical schools across Australia. The project was developed in association with general practitioners, clinical psychiatrists and psychologists. The overall aim of the project is to equip practitioners with the necessary clinical skills and knowledge base to treat effectively 60–70 per cent of the people who present to general practice with depression and anxiety disorders.

Examples of other activities

Pharmaceutical companies have contributed significantly to the management and treatment of depression. Most pharmaceutical companies have developed consumer support programs to encourage adherence to ongoing medication regimes (Eli Lilly – Breakthrough, Pfizer – Rhythms). Smithklein Beecham has also supported the development of primary care support personnel with mental health expertise. Additionally, the INSIGHTS program, conducted over the last five years by the Roche pharmaceutical company, in association with psychiatrists and general practitioners, is estimated to have reached almost half of the general practitioner workforce. Pfizer pharmaceuticals actively promoted the PRIME-MD diagnostic program in Australia and has recently provided extensive support for non-pharmacological treatments developed at the University of New South Wales.

The Focused Educational and Psychological Therapy Program (FEPP) is being funded by the pharmaceutical industry to provide a practical, focused, psychological therapy approach for use by general practitioners in the treatment of depression. FEPP comprises strategies based on principles of CBT and interpersonal therapy combined with consumer education materials. General practitioners will be trained in the use of FEPP by video instruction together with face to face workshops. FEPP is designed for both acute treatment (six weeks) and maintenance therapy (12–18 months).

The NHMRC has funded projects on depression in people with tinnitus and diabetes at the University of NSW. The aim of the tinnitus project, which has been completed, was to develop and evaluate a psychological intervention for the amelioration of tinnitus-related distress. The diabetes project aims to develop and evaluate a psychological intervention for the reduction in stress related to life events, daily hassles and the diabetes itself.

5.4 Evaluation and monitoring

Evaluation and monitoring are components of most of the initiatives previously presented. This section, therefore, describes only those additional activities that have not yet been described.

Commonwealth Government

The 1997 SMHWB along with this collaborative *National Health Priority Areas Report on Mental Health* are major Commonwealth initiatives to monitor depression in the Australian population. Additionally, data on the prevalence of depression in children and adolescents will be available in early 1999.

The Office for the Older Australians and Mental Health Branch are currently conducting a scoping study into the needs of older people who have a mental disorder. The study is auspiced by the National Mental Health Working Group and examines whether any special action is required to ensure appropriate accommodation, care and treatment for older people with psychiatric disability, including depressive disorders. The AIHW has been commissioned by the Office for the Older Australians to report on the extent to which existing service systems meet the needs of this client group, and also advise on modification to existing data sets that would ensure that more appropriate data were collected in the future related to older people with mental disorders.

The Commonwealth is planning an evaluation of the Aboriginal and Torres Strait Islander Emotional and Social Well Being (Mental Health) Action Plan. This evaluation, due for completion by December 1999, aims to assess the effectiveness, efficiency, and appropriateness of the services provided under the Action Plan. In particularly, given the innovative approach to service delivery that the Action Plan seeks to set in place, the evaluation will aim to identify models that represent good practice in a range of settings.

State/Territory governments

New South Wales

Macquarie University, in collaboration with Northern Sydney Mental Health Services, is evaluating the *ACE* depression prevention targeted program for secondary school students.

The impact of the *RAP* program in Catholic schools in Western Sydney is being evaluated.

The Centre for Mental Health, NSW Health Department is undertaking a consultancy to develop an Evaluation Manual for Suicide Prevention Programs in NSW. The Centre is also in the preliminary stages of planning the evaluation of the NSW School Depression Prevention Project.

Western Australia

Western Australia purchased additional data from the 1997 SMHWB that will provide State-specific data on the prevalence of depression and associated disorders. This will assist service planning and evaluation.

The Health Department is also contributing to the development of a Western Australian Aboriginal child health survey that will provide similar information to the Western Australian Child Health Survey.

A major program to enhance mental health clinical information systems and data bases is underway that will improve capacity for service evaluation and research in relation to all mental health issues.

A Centre for Mental Health Research has also been established. Its purpose is to undertake applied research in mental health. This may well include research in relation to the prevention and treatment of depression.

Tasmania

Tasmania is in the process of installing a new information system which will allow more accurate collection and analysis of data on depression. A major survey of health and wellbeing being conducted later this year will provide information to facilitate better service provision.

Australian Capital Territory

ACT Mental Health Services has appointed a project officer to collect data regarding the management of postnatal depression both within and outside the service. Service protocols will be developed from these data.

6 Opportunities and future directions

The pronounced suffering and disability associated with depressive symptoms and disorders could be substantially reduced with concerted efforts across the health care continuum and across sectors of care, communities and governments. Gains in the prevention and treatment of depression would contribute considerably to the wellbeing of Australians. Furthermore, success in relation to depressive disorders would flow on to other mental disorders, general wellbeing, and also to physical disorders, particularly those identified as other NHPAs. This chapter considers opportunities and potential future directions in relation to depression. The boxes highlight the main points that emerge from this report that could be further developed into strategic actions in the proposed National Depression Action Plan. Work on this Plan will commence in 1999 to identify priorities and strategies for national interventions for the years 1999 to 2001 (see Section 6.4).

Concerted action by the health sector, in collaboration with non-health sectors, will be required to bring about the changes needed in the physical, economic and social environmental conditions associated with depressive disorders in Australia. These actions will involve all levels of government, the private sector, and non-government and community organisations. The previous chapter revealed that many important initiatives are currently underway. The proposed National Depression Action Plan will play an integral role in advancing further opportunities for improvement.

In order to discern the best way forward at all levels of the health care continuum, it is necessary to:

- identify current structures and activities that have been shown to be effective;
- address issues related to the prevention and management of depressive disorders;
- determine existing mechanisms that may be able to address these issues; and
- suggest achievable opportunities for the future.

The National Workshop on Depression, held in November 1997, identified five priority areas for strategic intervention. These were: prevention and promotion; early intervention; management and treatment; community education; and evaluation and monitoring. Aboriginal peoples and Torres Strait Islanders were noted as a high priority population group. The following discussion acknowledges and encompasses these priorities.

6.1 Promotion and prevention

Promotion

The principles of the *Ottawa Charter 1986* recognise that a framework for mental health promotion needs to incorporate creating supportive environments, developing personal skills, developing healthy public policy, reorienting health services toward prevention, and strengthening community action. Such initiatives

would impact broadly on all aspects of mental health and wellbeing, and thereby directly and indirectly affect depression.

Opportunity/future direction 1

Identify residential, educational, workplace, community and social environments that enhance mental health, and facilitate their development and adoption.

Identification and development of environments that support mental health and wellbeing are the responsibility of all sectors. Risks for depressive disorder and barriers to mental health span all of life's domains—environmental, social and cultural, socioeconomic, personal and interpersonal. All these domains need to be addressed through broader health, social and economic reform agendas. Examples of commitments to providing mentally healthy workplaces are evident in the provision of parental leave, carer's leave, bereavement leave, and access to high-quality childcare services.

The *Jakarta Declaration 1997* acknowledges the importance of promoting social responsibility for health and improving the community's capacity for developing and sustaining health-enhancing environments. Barriers to the creation of mentally healthy environments need to be identified and eliminated. The development of supportive environments is the responsibility of the entire community. The principles of health promotion highlight the empowerment of the community to enable it to take responsibility for the creation of healthy, sustainable environments. The approach is proactive, ensuring that the community has the knowledge to make appropriate decisions and find solutions to meet its own identified needs.

Opportunity/future direction 2

Develop promotion activities that widely inform and encourage people to adopt mentally healthy lifestyle choices. More evidence is required regarding effective mentally healthy lifestyle choices, but those that appear to be mental health promoting include optimistic styles of thinking, coping strategies that enable resilience in the face of life stressors, and physical exercise.

At an individual level, people need to be informed about mentally healthy lifestyle choices and provided with knowledge that enables them to know when their mental health is at risk and when it is time to seek help. More evidence is required regarding what comprises mentally healthy lifestyle choices. However, the available evidence suggests that optimistic styles of thinking, coping styles that approach and attempt to resolve problems, having an available and effective social support network, having productive ways in which to fill one's time, and taking adequate physical exercise, are helpful in terms of promoting mental health.

People who are currently experiencing an episode of mental disorder may not make healthy lifestyle choices. To prevent current disorder episodes from having long-term negative effects, support structures need to be put in place. An example of such a support structure is the mutual support group for people experiencing depressive disorders, where they can benefit from ongoing social support.

Opportunity/future direction 3

Improve mental health literacy through promotion activities and community education—specifically, improve recognition of depressive symptoms and disorders and knowledge regarding the availability and efficacy of different treatment options.

More specifically in relation to depression, there is a need for improved community education about depression and its treatment. Research has shown that depression is a condition that is surrounded by misinformation in the community (Jorm et al 1997a). At the most basic level, people need to know how to recognise depressive disorders, and in particular, how to distinguish disorder from normal life problems. People also need to be aware of the types of life events and risk factors that may increase their vulnerability to depression, so that they can take preventive actions.

The community then needs to be informed of effective ways of dealing with life problems in order to reduce their potential to precipitate a depressive response. There is, however, need for a better evidence base regarding the types of actions that are most effective for different types of problems. Better information is required in terms of both self-management strategies and professional help-seeking.

There is a particular need to improve the public's knowledge of the types of treatments offered in specialist care and their efficacy. This may reduce barriers to seeking specialist care, including the stigma attached to undertaking treatment by a specialist. Specifically, the public is not well informed about the range of psychological treatments and their efficacy, and has negative perceptions of pharmacological interventions and ECT, which are treatments that may be life saving in cases of severe depressive disorder. The community is not well informed of the distinct and diverse nature of psychologists and psychiatrists and the services offered by each profession.

For psychotherapies and counselling techniques, the APS has recently developed initiatives to improve the public's knowledge of the role and skills of psychologists. Such activity may go some way toward heightening the public's mental health literacy. The community needs to become more informed about mental health services, knowing the range and cost of health-care actions that are available and the potential outcomes of each.

Opportunity/future direction 4

Encourage the media and primary care workers, particularly general practitioners, to play a major role in disseminating information to improve the community's mental health literacy.

The media has a substantial role in informing the community, by providing accurate, informed and non-stigmatising information related to mental health and mental disorders. Care needs to be taken, however, not to trivialise the impact of depression. It is important to get across the message that the development of depressive disorder is not an inevitable response to life's stressors; and that although mild, transitory symptoms of depression are common reactions to adversity, depressive disorders are serious conditions that require treatment.

Some innovative initiatives have been undertaken in this regard internationally, including depression screening days. Primary care workers, particularly general practitioners, are also well placed to improve the public's mental health literacy, through providing promotion and prevention information.

Overall, information needs to be widely disseminated regarding:

- de-stigmatising depression and associated help-seeking;
- the availability of self-help groups and effectiveness of self-help models for those with known depressive risk factors (eg bereavement, family conflict, drug-related harm);
- effective ways to alleviate depressive symptoms through lifestyle changes (eg physical exercise, social relationships);
- the type, availability, standard and effectiveness of public mental health services, counselling services, psychological services, and specialist psychiatric services available in the local area.

Prevention

Opportunity/future direction 5

Rigorously evaluate and widely disseminate the results of promotion and prevention activities.

Promotion and prevention constitute an area of particular research need, as there is not a solid evidence base on which to advocate particular strategies. It is acknowledged that acquiring such an evidence base is difficult, as these types of activities are not easy to evaluate with rigorous research techniques, such as randomised controlled trials. Consequently, more effort is required to provide much needed research evidence in these areas and to access and disseminate evidence from overseas research. Funding sources also need to be identified to encourage research into promotion and prevention.

Opportunity/future direction 6

Begin prevention activities early in life with programs to encourage positive parenting practices that help to develop optimistic and resilient children.

Opportunity/future direction 7

Identify and widely implement effective school-based programs that enhance children's resilience.

Prevention activities can occur across the lifespan, but are particularly salient early in life. Parenting programs to facilitate positive parenting skills, such as the Positive Parenting for Preschoolers program, recognise the negative impact of poor parenting on mental health later in life. Effective school-based programs that enhance resilience to depression are also available, but need to be rigorously evaluated and widely implemented. Examples of programs currently available

include the Gatehouse project, the Problem Solving for Life Program, Aussie Optimism, and the Resourceful Adolescent Program. These programs promote optimistic thinking, use of social support, and the development of effective coping skills, all of which will better enable young people to cope with life's problems.

Interventions to promote better marital and social relationships, in general, are also needed to improve people's resistance to depression. This recognises the importance of people's close interpersonal relationships and the need to enhance social skills in people of all ages so that they are able to develop and maintain supportive social relationships. More diffuse social ties may also be pertinent to maintaining people's wellbeing and preventing depressive symptoms. Macro reforms that enable communities to promote feelings of social connectedness and hope for the future may also encourage the development of supportive social relationships.

Opportunity/future direction 8

Develop prevention activities to inform people of high-risk situations for depressive symptoms, and gather research evidence to determine how best to deal with high-risk situations.

Determining effective ways to intervene for disabling depressive symptoms, as distinct from depressive disorders, is critical for preventing progression to depressive disorder. Improving public awareness of depressive symptoms is a first step. General promotion activities will contribute, but information also needs to be selectively targeted, possibly through groups where persons at risk might be found, such as drug prevention and treatment services and self and mutual help groups related to life events and risk factors. There also needs to be identification and dissemination of appropriate courses of action and support structures, including self-help strategies. More effective self-help strategies for those with symptoms of depression who do not present for professional treatment need to be identified and disseminated.

Opportunity/future direction 9

Targeted prevention activities are particularly important for the following high-risk groups: mid-to-late adolescents; women approaching and after childbirth; people exposed to major risk factors; older people in residential care; children of parents with mental illness; carers of people with disabilities; and Aboriginal peoples and Torres Strait Islanders. Support is required for the organisations that come into contact with these groups of people (eg schools, community-based organisations) to develop and provide targeted prevention activities.

The research evidence shows that there are some stages of life where prevention and early intervention may have an optimal effect, and therefore, a targeted higher risk approach to prevention is warranted. Middle-to-late adolescence is clearly such a time, as many first episodes of depression occur then. Recognition of the risk factors for first episodes of depressive disorder and awareness of the emergence of depressive symptoms are, therefore, important for parents, teachers, youth workers, and others interacting with young people, as well as for the young people themselves. Children of parents with mental disorders are young people who are doubly at risk and who need to be targeted for preventive interventions.

Another life stage of significance is the childbearing years for women. Childbirth-related services need to promote healthy lifestyle choices and encourage positive parenting practices, as well as screen for postnatal depression. Effective support services need to be identified and put in place for families at risk in the postnatal period. Best practice guidelines and programs need to be developed in collaboration with nursing and mental health providers and widely implemented. Obstetricians, antenatal and postnatal classes, Nursing Mothers Associations and playgroups are some of the avenues for the targeted dissemination of information related to postnatal depression, and these activities need to be supported and encouraged.

Early recognition of depressive symptoms and appropriate responses are required for older people living in residential care settings, and also for older people living within the community with complex health problems and experiencing social isolation. Prevention efforts could be focused around developing and enhancing supportive social relationships for older people and dealing with issues of loss and physical decline. High-quality physical and psychosocial environments that maximise each individual's health and wellbeing are required for residential care. Through the Aged Care Assessment and Home and Community Care programs, at risk older people could be identified and linked with supportive services. The International Year of Older Persons in 1999 provides an opportunity to highlight mental health needs at this time of life.

Supporting the mediation efforts of the Family Court is another potential avenue of prevention. If divorcing couples can be encouraged to resolve their custody, access and property settlements amicably, and to carefully consider the impact of their arrangements and interactions on their children, this may well have positive effects on both the current and future wellbeing of separating parents and their children.

Carers of people with mental or physical disabilities, particularly when there has been a dramatic decline in the condition of the person being cared for, are at risk of developing depressive symptoms if not adequately supported. Identifying these carers and linking them with effective supports may prevent the development of depressive symptoms and disorders. Some of the active organisations that advocate for carers were described in Chapter 5, and these could be encouraged to expand and promote their effective activities.

People who experience adverse life events such as bereavement and job loss may be at higher risk of developing depressive symptoms. Prevention activities need to be selectively targeted at such groups to inform them of their heightened level of risk, and of effective preventive actions to take. These groups need, therefore, to be clearly identified and able to access the strategies developed.

6.2 Early intervention, treatment and management

Recognition of depressive symptoms and disorders in primary care

Opportunity/future direction 10

Support and develop the pivotal role of general practitioners in recognising and treating depression.

Most people suffering from depressive symptoms will come into contact at some time with their general practitioner. A vital function of the general practitioner is, therefore, to recognise the depression and any comorbid conditions and respond appropriately. Strategies to address depressive disorders need to recognise and support the substantial role of general practice. While primary care encompasses a diverse range of services, the general practitioner plays a central role for the treatment of depressive disorders.

Opportunity/future direction 11

Provide education to primary care workers to improve the recognition of depressive symptoms, particularly in people from high-risk groups, such as adolescents, women after childbirth, older people in residential care, people presenting repeatedly with somatic symptoms, people exposed to major life stressors, and Aboriginal peoples and Torres Strait Islanders.

Workers in other types of primary care settings also need to be able to recognise depressive disorders and refer to appropriate follow-up services. Some primary care workers are especially likely to come into contact with people at high risk of depressive symptoms and disorder. These would include Aboriginal health workers, migrant health workers, workers in drug prevention and treatment services, and people providing care services for older people.

Of particular relevance for workers who deal with Aboriginal peoples and Torres Strait Islanders and people from culturally and linguistically diverse backgrounds is cross-cultural awareness and education to ensure identification of symptoms and referral to culturally appropriate treatment.

Recognition of co-existing disorders

Opportunity/future direction 12

Treatment requires determining whether the depressive disorder is secondary to another condition, such as anxiety, and encompassing the other condition within the treatment plan.

Related to the importance of recognising depressive disorders is recognition of contributing and pre-existing disorders. One of the most important of these is anxiety, which has been shown to frequently precede or co-occur with depressive disorder. Recognising and treating anxiety symptoms and disorders can have a major impact on the course of depressive disorder.

Collaborative models

Opportunity/future direction 13

Develop and support collaborative models of care, particularly between general practitioners and specialist mental health professionals.

There is potential for cooperation and collaboration between the main professional bodies responsible for the depression workforce—the RANZCP, the College of Clinical Psychologists within the APS, the RACGP, and the Australian and New Zealand College of Mental Health Nurses (ANZCMHN).

Collaboration between specialist mental health services and general practitioners is paramount. A recent example of such collaboration is the report, *Primary Care Psychiatry—The Last Frontier*, produced with National Mental Health Strategy funding by the Joint Consultative Committee in Psychiatry (comprising members of the RACGP and the RANZCP). It reviews the roles of general practitioners in mental health services provision and makes recommendations on their education and training.

There is a particular need to encourage referral networks between general practitioners, psychiatrists, psychologists, mental health nurses and other professionals. The associated professional bodies all have much to offer in terms of facilitating referral. While each of these professions can offer a range of services, they are best placed for the provision of particular types of services. Specifically, general practitioners and other primary care workers are in an ideal position for recognising depressive symptoms and first episodes of depression and for coordinating ongoing management of care. Psychiatrists are best placed to deal with more complex conditions, particularly those with bipolar or psychotic features, and are also needed for ongoing support within primary care. Clinical and counselling psychologists, and other mental health professionals, can provide psychotherapies including CBT, and offer counselling or referral to other services specialising in risk factors for depression. Case conferencing, shared management, coordinated care and fund-holding are all models that could be considered to improve the provision of integrated care that can address the multiple needs of people with depressive symptoms and disorders.

It is also important to ensure effective collaboration between public and private service providers. For example, shared-care approaches to mental health care, involving cooperation between general practitioners and public mental health services, have been applied under General Practice Strategy funding.

Opportunity/future direction 14

Ensure the participation of consumer groups and carers in the development and evaluation of models of care appropriate to specific population groups.

In the development of collaborative models of care, consumers, families and carers need to be active participants in decision making and advocacy. This is all the more important for population groups that are somewhat alienated from mainstream health services, especially Aboriginal peoples and Torres Strait Islanders, refugees, and young people. Associated consumer groups need to be actively sought out and encouraged to participate in the design, development and evaluation of services.

Access to primary and specialist care

Opportunity/future direction 15

Improve access to appropriate mental health services for young people, Aboriginal peoples and Torres Strait Islanders, people from culturally and linguistically diverse backgrounds, and people living in rural and remote communities.

Improved access to services is required by particular groups, specifically those in rural and remote communities and those with cultural barriers to mainstream services, such as Aboriginal peoples and Torres Strait Islanders and those from culturally and linguistically diverse backgrounds. Lack of specialist care and a reluctance to use general practitioners for mental health problems in small communities are major barriers in remote regions. Other types of primary care agencies may be able to offer services to people with depressive disorders to help increase access to appropriate and effective services in these communities.

Opportunity/future direction 16

Provide culturally appropriate treatment models for Aboriginal peoples and Torres Strait Islanders, and people from culturally and linguistically diverse backgrounds.

As the vast majority of Aboriginal peoples and Torres Strait Islanders with mental health problems present to primary care services, it is essential that adequate education be provided for all health workers in mental health issues, and that specialised workers in Aboriginal mental health also be available and work through primary health care settings. General practitioners working in areas where there is a significant number of Aboriginal peoples and Torres Strait Islanders also require cross-cultural training.

Strategies to address the emotional and social wellbeing of Aboriginal peoples and Torres Strait Islanders must be a priority. It is evident that the impact of past policies have contributed to the poor health status of Aboriginal peoples and Torres Strait Islanders and a coordinated approach across governments (through

the Framework Agreements[4]) is required in order to achieve the substantial change needed. A number of Aboriginal Health Services provide services in this area. There are benefits to providing emotional and social wellbeing services as a standard component of Aboriginal community controlled (primary) health services.

Aboriginal peoples and Torres Strait Islanders seek not only provision of mental health care in holistic frameworks, but also access to appropriate specialised care. Cross-cultural education is required to ensure that all health professionals have knowledge of the diverse cultural and social frameworks that operate throughout Australia in order to provide the appropriate level of care.

People from culturally and linguistically diverse backgrounds also require culturally sensitive and specific services. The impact of having poor English language skills also needs to be considered, as this may have a major effect on both access to and the effectiveness and appropriateness of mainstream services.

Opportunity/future direction 17

Target appropriate treatment services at young people, particularly those at higher risk through early school leaving, being homeless or unemployed, or having a parent with a mental disorder.

Another population requiring better services is young people. Young people have high rates of disorder, but low rates of service utilisation. Young men in particular are reluctant to take depressive symptoms to mainstream medical services. As young men are also at one of the highest levels of risk for suicide, providing services that they feel comfortable approaching is important.

Telephone counselling, drop-in adolescent health centres, and outreach services may be preferred sources of help for young people, and these could be used to disseminate prevention material as well as inform about treatment options. Agencies that are in contact with young people through services related to employment and unemployment, homelessness, drug-related harm, and the criminal justice system could be engaged to promote a better understanding of depression and other mental health issues and their treatment.

Opportunity/future direction 18

Enable schools to have a major role in identifying and supporting young people with current depressive disorders and symptoms, as well as those who are at risk through exposure to life stressors. Improve intersectoral links and partnerships between schools and mental health care.

Schools have a pivotal role in providing information and help to children and adolescents. However, intersectoral links need to be built, particularly between school counsellors and mental health providers. There is a need to find ways to

[4] Framework Agreements, based on the principles of collaboration, have been signed in all States and Territories between the Commonwealth Minister for Health and Aged Care, the Chairperson of the Aboriginal and Torres Strait Islander Commission, the State or Territory Health Minister, and the State or Territory-based NACCHO affiliate. For the first time Australian governments have formalised their commitment to a coordinated and collaborative approach to Aboriginal and Torres Strait Islander health that holds all stakeholders accountable for performance.

develop active and positive partnerships between schools, parents, children and service providers so that depressive symptoms are recognised and promptly treated. Schools and education systems have a responsibility to provide an adequate number of school counsellors, ensure that the service they provide is accessible and appropriate to young people and that the confidentiality and sensitivities of young people are respected and supported.

Opportunity/future direction 19

Investigate the use of technology in improving access to mental health services.

There is also an emerging role for technology in enhancing access to health services. This role is particularly evident in the provision of services to remote communities, but also for providing services for those people who prefer a more anonymous and less personal type of interaction. Telephone counselling is already nationally available, but there are also opportunities to use computer services and the Internet to provide promotion, prevention and even management services to remote locations and to targeted groups.

Another major access issue relates to the ability of people to purchase the types of mental health services that they may prefer. In the absence of comprehensive health insurance, psychotherapy may be a long-term and costly commitment that must be funded fully by the individual. Counselling services that address the social and psychological factors that contribute to a person's depression are also not subject to reimbursement through the MBS. Consequently, the full range of services that may potentially alleviate depressive symptoms and disorders are not available to those without the financial means to purchase them.

Best practice evidence-based guidelines, information and training

Opportunity/future direction 20

Develop, implement and support the adoption of best practice, evidence-based guidelines for detection and treatment of depressive disorders.

Guidelines and training are relevant within all mental health care settings but particularly within general practice, because of the pivotal role that general practitioners play in relation to the recognition and treatment of depressive disorders. Consequently, the ongoing training of general practitioners needs to ensure that they are vigilant for depressive disorders, particularly for people in high-risk groups. Materials to support general practitioners need to encourage recognition of depressive symptoms and comorbidity, provision of appropriate evidence-based treatments within a biopsychosocial model, and referral to or shared-care with specialists if necessary.

Best practice guidelines for specialist care could also be developed, implemented and supported. Such guidelines need to be based upon the best research and clinical evidence available, and regularly updated. Evaluation of the level of implementation and effectiveness of such guidelines also needs to be put in place.

Opportunities and future directions

The *Clinical Practice Guidelines,* being developed by the RANZCP, are a current initiative in this area.

Guidelines are unlikely to have much impact unless they are provided within a long-term education and support strategy. Furthermore, they need to be developed in collaboration with all the relevant stakeholders, which includes consumers, carers, families, primary care workers, specialist health providers, researchers and training institutions. Guidelines need to be embedded within effective and ongoing structures to educate and support, so that their uptake, rather than their proliferation, is enhanced.

In response to the rapid increase in the prevalence of depression in the adolescent years, the *NHMRC Clinical Practice Guidelines for Depression in Young People* are available specifically for the treatment of young people, and should be the focus for the management of this population group. Importantly, these guidelines inform clinicians that non-pharmacological treatments should be prioritised for adolescents, and that the effects of medications need to be more fully understood for children and adolescents.

Postnatal depression is another major area where general practitioners can have a significant role in the follow-up of mothers and infants in the postnatal period and where guidelines are urgently required. The use of screening measures such as the Edinburgh Postnatal Depression Screening questionnaire is recommended along with the implementation of clinical practice guidelines for the management of women with postnatal depressive symptoms, such as those currently being developed by the NHMRC.

Opportunity/future direction 21

Determine ways to enable the mental health workforce to be well trained and up-to-date with best practice.

The education, training and development of the mental health workforce more broadly is an issue warranting attention. Standards of training need to be developed and applied, and this may be particularly important for workers who are providing counselling services related to depression risk factors. Ongoing professional education and dissemination of up-to-date information need to be monitored and encouraged.

A key priority of the Second National Mental Health Plan is the education, training and professional development of the mental health workforce. The National Mental Health Strategy has supported a series of workshops to address education and training issues for the five mental health disciplines—psychiatrists, psychologists, mental health nurses, social workers and occupational therapists in partnership with consumers and carers. The workshops identified principles of practice that articulate the rights of consumers and carers, and common and discipline-specific values, attitudes and skills that should underpin the practice of those working in mental health and also inform education and training courses.

Funding issues

Opportunity/future direction 22

Consider ways in which funding arrangements can be used to improve the management of depressive disorders.

Funding arrangements were identified in Chapter 4 as one of the major barriers to the delivery of best practice collaborative models of care for depressive disorders. The Australian Health Care Agreements 1998–2003 confirm the cooperative relationship between the Commonwealth and the States and Territories in funding and ongoing reform of the delivery of public hospital services and related health services. While the Agreements do not specifically address depression, they have some potential to advance the objectives of the mental health priority area via the Commonwealth's commitment of $300m for the Second National Mental Health Plan and agreements by States and Territories to pursue reform objectives outlined in the Plan. The agreements also commit the Commonwealth and States/Territories to:

- explore options for reform in the integrated delivery and funding of primary care and specialist services for both pharmacological and psychological interventions;
- agree on Commonwealth/State/Territory strategic plans that address ways to reward or promote quality improvement; and
- continue to develop and report against national performance indicators with a particular focus on outcomes.

There may be the possibility of increasing the focus on preventive and psychological activities by including more items of these types in the MBS, and by recognising the increased time required by general practitioners to provide best practice in this area. The Medicare Services Advisory Committee has an important role in this, as it is responsible for advising the Minister for Health and Aged Care on evidence relating to the safety, effectiveness and cost-effectiveness of new medical technologies and procedures and the circumstances under which public funding should be supported. An example of alternative arrangements for the management of people with complex needs is provided by the coordinated care trials that are currently being conducted throughout Australia.

Information, monitoring and surveillance

Opportunity/future direction 23

Improve data regarding depressive disorders for high-risk groups, particularly young people, women after childbirth, older people in residential care, Aboriginal peoples and Torres Strait Islanders, refugees, and people living in rural and remote communities.

Chapter 1 and Appendix 2 clearly highlight the need for better data related to mental health conditions, in terms of both prevalence and service provision. This need is particularly urgent for Aboriginal peoples and Torres Strait Islanders.

Opportunities and future directions

At the most basic level, current service provision data collections could be enhanced to enable the identification of people with depressive disorders. Recording salient features related to the disorder (such as the age of the person and whether the disorder is related to childbirth or another major life event) and the types of service provided are also required. Leginski et al (1989) maintain that mental health data need to provide information on *who receives, what services, from whom, at what cost,* and *to what effect* in order to provide the necessary information for planning and evaluation. Current data related to mental disorder in general, and depressive disorders in particular, are a long way from this ideal.

Mental health data need to be recorded for young people, women after childbirth, older people, those living in rural and remote communities, people from culturally and linguistically diverse backgrounds (particularly refugees), and Aboriginal peoples and Torres Strait Islanders. Where feasible, current data collections need to reliably identify these groups and ensure that measures of mental health status are recorded. There are currently initiatives to improve data availability for some of these groups. A component of the SMHWB is targeting Aboriginal peoples and Torres Strait Islanders and another component has just been completed for children and adolescents. A scoping study on older people and mental disorder has been undertaken by the Department of Health and Aged Care.

Opportunity/future direction 24

Monitor the dissemination, uptake and effectiveness of guidelines.

There is an urgent need for the development of information systems through which to monitor practices and advances related to the treatment of depression. Firstly, the dissemination and uptake of guidelines needs to be known. Currently, uptake of the *NHMRC Guidelines for Depression in Young People* (and also the RANZCP Clinical Practice Guidelines when they are available) need to be determined along with evaluations of their effectiveness.

The four Support and Evaluation Resource Units (SERUs) noted in Chapter 5 have been established to develop program guidelines and protocols for particular projects and activities conducted by Divisions of General Practice. The Divisions have an important role to play in linking their activities to national research and guideline development agendas and involving clinicians in both primary and specialist care.

Opportunity/future direction 25

Design information systems to inform the planning and development of best practice treatment of depressive symptoms and disorders, and maximise input from all stakeholders.

Secondly, there is a need to monitor the efficacy of different treatments for subtypes of depression for different types of people. General practitioners may be well placed to provide information on the acceptability and effectiveness of the various treatments that they provide. They may be able to contribute to the development of a reliable database related to depression treatments. Specialist mental health providers could also contribute to such a database.

Qualitative information also has an important role, particularly for acknowledging and informing others about people's personal experiences of depressive disorder. The documentation and dissemination of individual 'success stories' is a valuable resource for people with depressive disorders, their carers, consumer groups, and those providing services.

Qualitative information is particularly relevant for Aboriginal peoples and Torres Strait Islanders, in order to express those aspects of their social and emotional experience that are difficulty to quantify. An important part of building appropriate responses to the emotional and social wellbeing of Aboriginal peoples and Torres Strait Islanders involves assisting community organisations and services to identify and disseminate 'success stories', which may assist other communities to choose responses to similar issues.

6.3 Research issues

Opportunity/future direction 26

Determine ways to fund priority-driven research on depression.

While there is a strong research base in many areas, consultations with stakeholders have identified the following as examples of areas where there is a relative lack of research and research funding support:

- factors and programs for supportive environments to enhance mental health and mentally healthy lifestyle choices;
- potential prevention strategies and their evaluation;
- factors that affect the development of first episodes of depressive disorder in young people;
- the manifestation, prevalence and factors related to depression in Aboriginal peoples and Torres Strait Islanders, including the development of culturally appropriate mental health measurement tools;
- the specific needs of refugees, and the development of validated research instruments;
- depression in older people in residential care;
- the link between depression and suicide in older men;
- the community's knowledge and perception of the mental health workforce;
- the efficacy of self-help treatments, such as support groups and St John's wort;
- potential psychosocial interventions and their evaluation;
- integrated care models best suited to different types of depression;
- treatments for dysthymia and cyclothymia;
- types of psychotherapies best suited to depressive disorders across the lifespan;

- treatment of depression in young people and also in older persons;
- cultural appropriateness of treatment for Aboriginal peoples and Torres Strait Islanders;
- treatments and interventions that can reach isolated communities;
- relapse prevention and maintenance treatments; and
- people who do not seek professional care.

Australia's existing strengths in depression research need to be nurtured. Past funding of investigator-initiated research on depression has produced some notable achievements and needs continued support. However, the above examples of research issues that stakeholders identify as needing attention highlight the need for additional priority-driven research. The recent report of the Health and Medical Research Strategic Review has also noted that 'Australia needs a well managed, priority-driven program of strategic, development and evaluation research. This program requires explicit funding, national coordination, and a rigorous priority-setting process. Capacity must be built to undertake this research and to facilitate the transfer of research results into policy and practice' (Health and Medical Research Strategic Review 1998, p93). Such a program, which complements the existing funding mechanisms for investigator-initiated research, would help to increase knowledge and improve practice in neglected aspects of depression.

6.4 National Depression Action Plan

The National Workshop on Depression, held in Canberra in late 1997, proposed a framework for a three-year plan of action to improve health care practices and health outcomes for depression, covering the areas of promotion and prevention, early intervention, management and treatment of depression, community education and data needs. For each of these areas the plan identifies goals, strategies, indicators of success, milestones and barriers. The goals for each area are listed in Appendix 3.

Opportunity/future direction 27

The development and implementation of a proposed National Depression Action Plan in the years 1999–2001 is a major opportunity to design strategic actions that will improve the mental health and wellbeing of Australians.

This report has explored further the major themes of the National Workshop and provides a knowledge base from which to proceed. The focus on depression will be consolidated in a proposed National Depression Action Plan (NDAP) which will progress the initiatives suggested here into a strategic plan to effect real gains for the Australian community. Its main aim will be to identify priorities and strategies for national interventions for the years 1999 to 2001.

The NDAP will develop initiatives across the entire health care continuum, as outlined in the model presented in Chapter 4. Comprehensive consultations will also be undertaken during the drafting stages and commitment to action sought from key stakeholders prior to its release for implementation. The NDAP is,

therefore, a major and timely national activity that has the potential to make significant improvements to the mental health and wellbeing of the Australian community.

The NDAP will build on the framework proposed by the Depression Workshop, incorporate the issues identified in this report, utilise the Promotion and Prevention Action Plan framework (see Box 6.1), as well as consider current activity and research. This will ensure that previous and current work in the area is built on and that new interventions are integrated within other national mental health activities. It is recognised within the context of broader policy initiatives that depression is a key concern. Examples of health policies that also address depression include the National Strategy Against Drug Abuse, the National Youth Suicide Prevention Strategy and the National Health Policy for Children and Young People. Given that depression is frequently associated with suicide and drug-related harm, and that young people are at particularly high risk, integration into other national strategies is essential.

Box 6.1 Promotion and Prevention Action Plan (PPAP)

The PPAP identifies the following priority groups: peri-natal and infants 0–2 years; toddlers and pre-schoolers 2–4 years; children 5-11 years; young people 12–17 years; young adults 18–24 years; adults in the workplace; older people; communities and families experiencing adverse life events; rural and remote communities; Aboriginal and Torres Strait Islander communities; people from culturally and linguistically diverse backgrounds; consumers, carers and community agencies; whole of community; media; and health settings, professionals and clinicians. For each of these groups, the PPAP provides information related to national activity in the areas of: priority mental health targets; rationale; evidence base; longer-term outcomes; communities of interest; settings; linked initiatives; national strategies; and process outcomes. It is also intended that indicators will be developed for each of the identified priority groups.

6.5 The next NHPA report on mental health

This report is a positive attempt at building a sound strategic framework to improve the mental health and wellbeing of Australians. The contents will be used to both inform and assist governments and the community in relation to those areas of intervention that will provide most impact in terms of sustainable improvements and outcomes, thus reducing the burden to individuals, families, workplaces and the community. It builds on the achievements gained from the implementation of the first National Mental Health Plan and, as part of the Second National Mental Health Plan, continues to implement the National Mental Health Policy and National Mental Health Strategy. The report builds on those protective factors that are known to work effectively in maintaining mental health as well as identifying areas in need of further action.

Depression was identified as an area where significant gains could be made in both mental and physical health. However, the NHPA initiative is aimed at improving mental health in general in the Australian community. Therefore, while actions specifically related to depression will result from this report, in particular through the proposed National Depression Action Plan, service reform will continue to be a priority for other groups such as those suffering schizophrenia, dementia and drug-related harm. Major reforms in the areas of service provision,

standards, evidence-based practice, workforce design and community integration will continue to be implemented in all areas of mental health.

In the next *NHPA Mental Health Report*, specific gains in the area of depression will be reported, along with updates of indicators more generally related to the mental health status of the Australian population.

Appendix 1

Depression in Australia: indicator-based reporting

This appendix provides statistical information on depression using a set of indicators. The statistical information provided is limited to meet the data requirements for each indicator, although the interpretation offered is somewhat broader than the design of the indicator would suggest. This is in accordance with the basic tenet of indicator-based reporting.

What are indicators?

Indicators are conceptual conveniences, ways to extract information from available data for enhanced interpretation and utility. However, the quality and usefulness of indicator-based reporting is enhanced further by establishing a defined set of indicators across the continuum of care, an approach favoured in NHPA monitoring and reporting. The purpose in selecting a defined set is twofold: to organise the wide-ranging information into manageable size, and to ensure that the best information is always extracted and reported.

The format

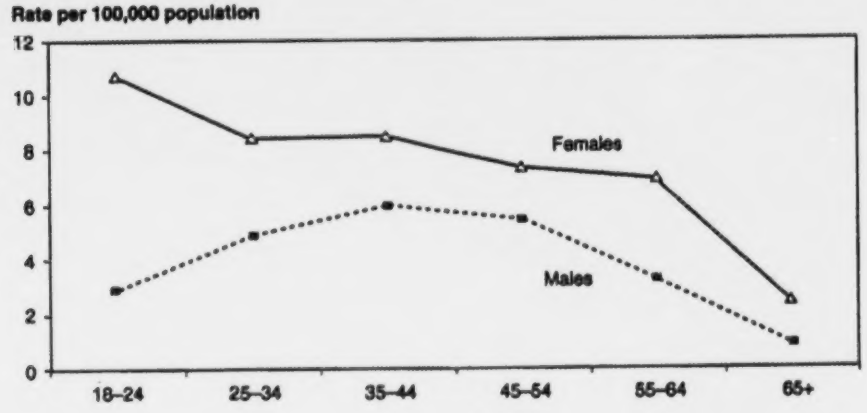
The dot point format used for indicator-based reporting here is simple and to the point, aimed at providing a clear interpretation of the results. Where possible, time series and collateral information is included to enhance the interpretability of the results. Data issues specific to each indicator have also been described.

No attempt has been made to discuss the health issues in a comprehensive manner. It is recommended that this appendix be read in conjunction with overviews of the epidemiology of mental health in general and depression in particular, given in Chapters 1 and 2, respectively. For detailed statistical and data issues, also see Appendix 2.

While considerable progress has been made in developing and reporting indicators for other NHPAs, this is the first time that information has been put together for depression in this format. The quality and comparability of much of the data presented here is variable. These problems, with appropriate caveats, are discussed throughout the appendix. The readers are nonetheless urged to build in these caveats in interpreting the results.

Appendix 1

Indicator 1.2: Prevalence rates for depressive disorders



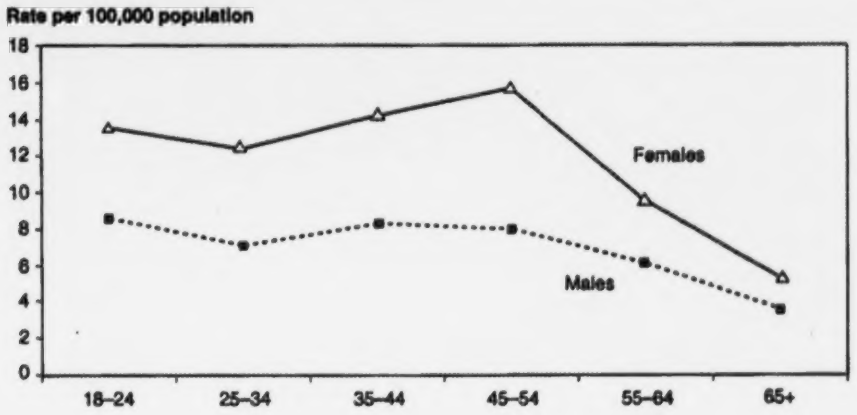
Population group	Age group (years)						Total
	18–24	25–34	35–44	45–54	55–64	65 and over	
Males	2.9	4.9	6.0	5.4	3.2	0.8	4.2
Females	10.7	8.4	8.5	7.3	6.9	2.4	7.4
Persons	6.7	6.6	7.2	6.4	5.0	1.7	5.8

Notes: Includes all affective disorders.
Based on data for persons aged 18 years and over only.

Source: 1997 National Survey of Mental Health and Wellbeing: Adult Component, Australian Bureau of Statistics (1998).

- This indicator has been designed to provide a comparative picture of the prevalence of depressive disorders in Australia.
- Overall males have a lower prevalence rate of depressive disorders compared to females. The age-standardised prevalence rate among females over the age of 18 years is 76 per cent higher than their male counterparts.
- While the prevalence rate ratio varies with age, the male rate remains consistently lower than the female rate across all age groups. In 1997, the female rate is almost four times higher than the male rate in the age group 18–24 years, but declined to less than 37 per cent higher in the age group 45–54 years.
- The prevalence rate for depressive disorders among females declines consistently over the life-time although the decline is much slower between the ages of 25 and 54 years. The male rate, on the other hand, increases to peak in the age group 35 to 44 years before declining.
- Strong associations exist between major depressive disorders, other affective disorders and substance use disorders (ABS 1998, Burvill 1995). According to the 1997 SMHWB, over half the people with an affective disorder or depressive disorder also have an anxiety disorder (ABS 1998).

Indicator 1.3: Prevalence rates for anxiety disorders



Population group	Age group (years)						Total
	18–24	25–34	35–44	45–54	55–64	65 and over	
Males	8.6	7.1	8.3	8.0	6.1	3.5	7.1
Females	13.8	12.4	14.5	15.9	9.5	5.4	12.1
Persons	11.2	9.8	11.4	11.9	7.8	4.5	9.7

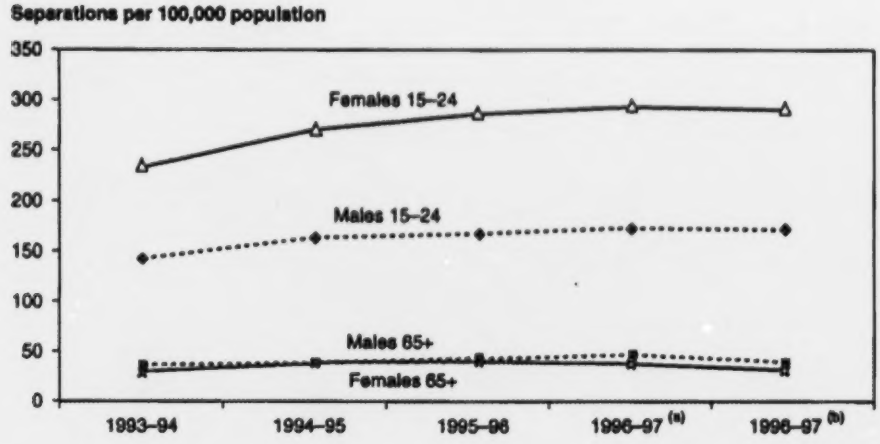
Note: Based on data for persons aged 18 years and over only.

Source: 1997 National Survey of Mental Health and Wellbeing: Adult Component, Australian Bureau of Statistics (1998).

- This indicator has been designed to provide a comparative picture of the prevalence of anxiety disorders in Australia.
- Overall, males have a lower prevalence rate for anxiety disorders compared to females. The age-standardised prevalence rate among females over the age of 18 years is 70 per cent higher than their male counterparts.
- While the overall patterns of age-specific distributions of the prevalence are similar in the two sexes, the female rate was found to be almost double the male rate in the age group 45–54 years in 1997.
- According to the 1997 SMHWB, over half the people with an affective disorder or depressive disorder also have an anxiety disorder (ABS 1998). However, the pattern of age-specific distribution for the two types of disorders is not the same among females.
- Over half the people with an affective or depressive disorder also have an anxiety disorder (ABS 1998).

Appendix 1

Indicator 2.1: Hospital separations for suicide and self-inflicted injury among young adults aged 15–24 years, and older people aged 65 years and over



Age group	Sex	Year				
		1993–94	1994–95	1995–96	1996–97(a)	1996–97(b)
Young adults (15–24 years)	Males	142.4	162.0	163.1	171.9	167.8
	Females	235.6	271.4	287.4	297.5	290.6
Older people (65 years and above)	Males	38.0	40.9	41.8	44.5	40.8
	Females	30.4	38.3	38.1	36.8	34.2

(a) In 1996–97 multiple diagnoses were recorded. These figures are only based on the principal external cause to make them comparable with the previous years in this table.

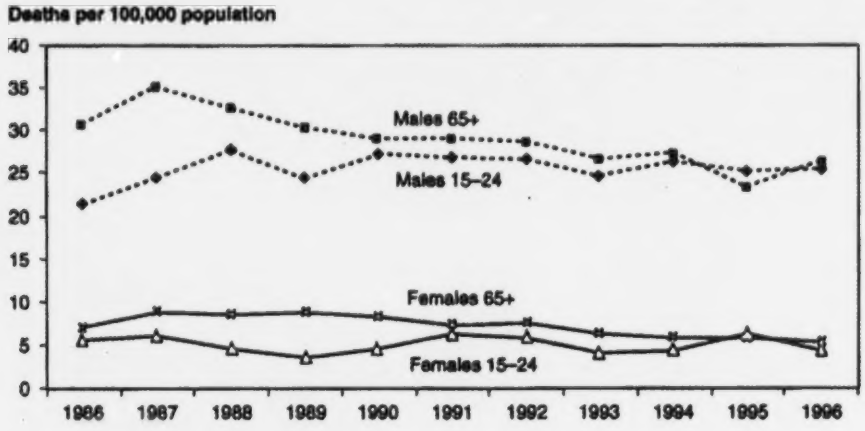
(b) Checking all diagnoses but only counting once for each separation, ie if a record was coded as poison and gunshot then the record would only be counted once.

Note: Rates, given as separations per 100,000 persons, were standardised to the Australian population at 30 June 1991.

Source: AIHW National Hospital Morbidity Database.

- Suicides and self-inflicted injury are often expressions of breakdowns in social integration and cohesion. Trends in suicide attempts provide some indication of changes in the pattern of mental health status of the population.
- This indicator has been designed to provide a comparative picture of suicide and self-inflicted injury between the two sexes in the age groups 15–24 years and older people aged 65 years and over.
- The hospital separation rate for suicide and self-inflicted injury for females aged 15–24 years is consistently higher, from 1993–94 to 1996–97, compared to males in the same age group.
- In contrast, the separation rates in the older age group (65 years and above) indicate a marginally higher proportion of males compared to females.
- The younger age group shows higher hospital separation rate for suicide and self-inflicted injury compared to the older age group in both sexes.
- The age-standardised rates were more than four times higher among young males and more than eight higher among young females in 1996–97 in comparison with those aged 65 years and over.

Indicator 2.2: Death rates for suicide among young adults (15–24 years) and older people (65 years and over)



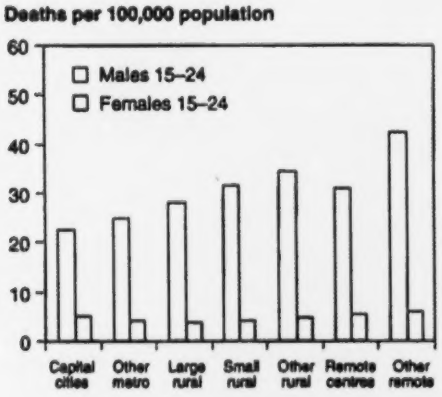
Age group	Sex	Year										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Young adults (15–24 years)	Males	21.3	24.7	26.2	24.1	27.3	26.8	26.6	24.5	26.7	25.0	25.5
	Females	5.4	6.0	4.5	3.5	4.4	6.3	5.7	4.0	4.2	6.3	4.3
Older people (65 years and over)	Males	30.7	35.5	32.7	30.1	29.1	29.0	26.8	26.4	26.9	23.4	26.1
	Females	7.0	8.7	8.4	8.6	8.1	7.2	7.5	6.2	5.6	5.7	5.2

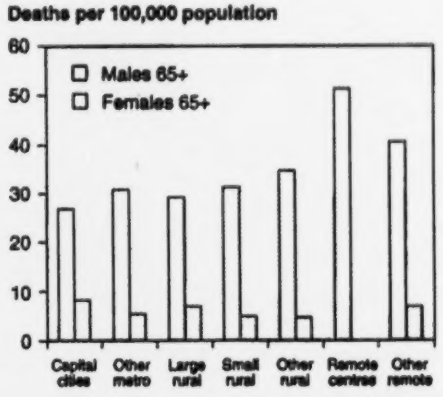
Note: Rates, given as deaths per 100,000 persons, were standardised to the Australian population at 30 June 1991.
Source: AIHW National Mortality Database.

- This indicator has been designed to provide a comparative picture of suicide rates in the two sexes in two different age groups.
- Suicide rates are known to be strongly associated with age. High-risk groups for suicide are young men between the ages of 15 and 24 years and older men aged 65 years and over.
- The suicide rates are higher among males than females in both the age groups. In 1996, the death rate ratio was almost six times higher in the age group 15–24 years, and more than five times higher among those aged 65 years and over when compared to females.
- Suicide rates are consistently higher for males in the two groups compared to females. However, females aged 65 years and over have a slightly greater risk of suicide than younger females aged 15–24 years.
- Consistent declines in suicide rates are apparent among both males and females among those aged 65 years and over, since 1987. However, no such trends are noted in the younger age group.
- More people attempt than complete suicide; mortality data may underestimate the incidence of self-harm. This information therefore should be interpreted in conjunction with the hospital separation data for suicide and self-inflicted injury.

Appendix 1

Indicator 2.3: Death rates for suicide in rural and remote areas among young adults (15–24 years) and older people (65 years and over)





		Metropolitan zone		Rural zone			Remote zone	
Age group	Sex	Capital cities	Other metro	Large centres	Small centres	Other rural	Remote centres	Other remote centres
Young adults (15–24 years)	Males	22.7	24.9	27.9	31.5	34.4	31.0	42.5
	Females	5.2	4.1	4.0	4.1	4.8	5.5	6.1
Older people (65 years and over)	Males	26.7	30.7	29.2	31.1	34.4	51.1	40.4
	Females	8.2	5.5	6.9	4.9	4.6	0.0	6.8

Note: Rates, given as deaths per 100,000 persons, were standardised to the Australian population at 30 June 1991.
Source: AIHW National Mortality Database.

- This indicator has been designed to understand the mortality of depression in rural and remote Australia in comparison to that in metropolitan areas, with particular emphasis on those in the age groups 15–24 years and 65 years and over. Suicide rate has been used as an indicator on the assumption that depression is a significant contributor to suicide. Mortality data for the period 1986–96 were pooled to generate the estimates.
- Suicide rates are higher among those living in remote areas, which in turn, are higher than the rates in metropolitan areas, in both age groups. Overall, a progressive increase in the rate is noted as one travels away from larger cities.
- While suicide rates are generally comparable among young adult and older males across various RRMA areas, the rates are much higher among older males living in remote areas.
- Younger females have an overall lower risk of suicide compared to older females except in other rural areas and remote centres.

Appendix 2

Data and statistical issues

This appendix provides an overview of the gaps and deficiencies in national mental health-related data collections, as well as technical information to assist in the interpretation of demographic and statistical methods used in the report. Data and statistical issues about specific aspects of mental health have been discussed in relevant sections of the report. However, there are several common issues, relating mostly to the nature and quality of data, their comparability, availability, gaps and deficiencies, that are described more generally here. Notes on demographic and statistical procedures—age-standardisation, estimation of rates and ratios, etc.—have also been assembled here for easy reference.

NHPA's *goals and targets* approach has some definite requirements for the range of information collected, and its analysis. The adoption of a set of defined indicators not only necessitates the development of operational definitions, standardised data elements and establishment of baselines, but also appropriate time-series information for trend monitoring. In some cases, data collections may need to be tailored to meet the monitoring requirements, or new data collections instituted if required.

Information on NHPA indicators of depression has been presented in this report for the first time. Several data definition and collection issues however still need to be carefully resolved. This appendix briefly touches upon some of these issues. For a general discussion of sources, developments and deficiencies of Australian health statistics, see *Australia's Health 1998* (AIHW 1998a).

Data issues

Data sources

Sources of data for monitoring mental health are wide and varied. Many of the data collections that may be used for monitoring are by-products of administrative collections (for example, deaths and hospital separations). Other collections are specifically designed to monitor the prevalence of mental disorders and associated complications. However, most of the latter collections are not national in scope or coverage.

Statistical information for this report was extracted from several national and quasi-national data sources. These include the National Mortality and Morbidity databases, NHS, SMHWB, and the Western Australian Child Health Survey. Where no national or quasi-national data are available, relevant information from literature has been included to illustrate the point.

National Mortality Database

The AIHW maintains a national database of deaths registered in Australia, based on data provided to the ABS by the State and Territory Registrars of Births, Deaths and Marriages, currently for the years 1980–96. The Institute's database, also referred to as the National Mortality Database, has the cause of death coded according to the ninth revision of the International Classification of Diseases.

Appendix 2

Registration of deaths in Australia is the responsibility of the State and Territory Registrars of Births, Deaths and Marriages. Information on the cause of death is supplied by the medical practitioner certifying the death, or by a coroner. Other information about the deceased is supplied by a relative or a person acquainted with the deceased or by an official institution where the death occurred. Registration of death is a legal requirement in Australia, and compliance is virtually complete.

Mortality data remain the most comprehensively collected national data pertaining to health. The reliability of these data depends principally on the information listed on the death certificate, or that available in coroners' records, as well as on the reliability of the application of ICD codes to that information. In particular, deaths relating to mental problems such as dementia are substantially under-reported on the doctor's death certificate, as well as in the ABS coding which until 1996 was based on a single underlying cause of death. The latter issue has now been addressed following multiple cause of death coding by the ABS, that started in 1997.

A major difficulty encountered in using the mortality database is the poor identification of Aboriginal peoples and Torres Strait Islanders in New South Wales and Victoria, and absence of information on deaths of Aboriginal peoples and Torres Strait Islanders in Queensland until 1997. Analysis of the mortality of Aboriginal peoples and Torres Strait Islanders has therefore been limited to the Northern Territory, Western Australia and South Australia.

National Hospital Morbidity Database

This database, also maintained at the AIHW, is based on information collected by various State and Territory health authorities, and by the Department of Veterans' Affairs. The AIHW receives the data from these agencies, and maintains it in a national database.

Hospitals collect information about the patients they treat, both administrative and clinical data, including sociodemographic, diagnostic and duration of stay data, and the procedures performed. The information is event-based rather than individual-based.

Hospital separation data are limited in their utility as indicators of disease incidence and prevalence in that they do not identify multiple admissions for the same person. The feasibility of addressing this problem by linking records from different data collections is being investigated. The numbers and trends in hospital separations are also affected by differing admission practices, differing levels and patterns of service provision, and changes in coding practices over time.

The coverage of public and private hospitals in the database also varies. Information on separations from private hospitals in Victoria, Western Australia, the Australian Capital Territory and the Northern Territory, for example, is not included in the national collection for the years 1991–92 and 1992–93.

National Health Survey 1995

The 1995 NHS was the second in a series of five-yearly population surveys conducted by the Australian Bureau of Statistics to provide national benchmark information on a range of health-related issues. The Survey collected information on mental health status using the Short Form-36 (SF-36) instrument (Ware et al 1993).

The SF-36 questionnaire was included in the NHS for the first time in 1995, collecting self-reported information about general health and wellbeing from about 18,800 adult residents of private dwellings. SF-36 collects information across eight dimensions of health and wellbeing from which two summary measures can be calculated: the Physical Component Summary (PCS) and the Mental Component Summary (MCS). The procedure for calculating MCS is described later in the Appendix.

The MCS information is derived from a subset of items that ask respondents about their general mental health as well as any role limitations due to emotional problems. Questions inquiring about respondents' vitality and social functioning are also asked. Examples of questions include the amount of time spent feeling nervous or happy, the amount of time spent feeling 'full of pep', and the impact that emotional problems might have in limiting social activities.

National Survey of Mental Health Services

A national survey of all specialised public mental health services was first undertaken by consultants engaged by the former Commonwealth Department of Health and Family Services for the financial year 1993–94. The management and development of subsequent surveys for 1994–95 and 1995–96 have been the responsibility of the AIHW. Data are collected from central health departments in each State and Territory, from regional, area and district administrative units, and from organisations providing specialised mental health services. The 1995–96 survey included data provided by 187 mental health service organisations, which were all identified by the respective State and Territory central health administrators. The survey, which covers a range of inpatient and non-inpatient services, forms the main source of information for these services.

National Survey of Mental Health and Wellbeing (Adult Component) 1997

The survey, an initiative of and funded by the Commonwealth Department of Health and Family Services (now Health and Aged Care), as part of the National Mental Health Strategy (NMHS), was undertaken to collect broad-based epidemiological data on the mental health status of the population. The survey, conducted by the ABS in 1997, included 10,000 Australians aged 18 years and over who were selected from random households. Questions were designed to obtain information on the prevalence of a range of mental disorders. The survey also collected information on the level of disability associated with mental disorders, as well as on health services used and the help needed as a consequence of a mental health problem.

The Composite International Diagnostic Interview (CIDI) was used to diagnose mental disorders using criteria that enable coding to ICD-10 diagnostic categories. The CIDI allows a non-clinician interviewer to collect information about symptoms of mental disorders. A computer program was used to score the responses for diagnosis (WHO 1994).

The BDQ was used to measure general levels of disability. Respondents were asked whether they were limited in some activities (such as running, sports, carrying groceries, bathing, climbing stairs) because of health problems. They were also asked whether they have had to stop certain activities, had decreased motivation, or experienced deterioration in their social relations. All items referred to the four weeks prior to the interview.

The Medical Outcomes Study (MOS) method of scoring (scale of 0–16) was used, with a high score indicating that the respondent has been limited in performing activities by health problems (ABS 1998).

Data development

Between 1993 and 1998, initiatives by the Commonwealth, States and Territories under the NMHS have led to improvements in the development and collection of data on a range of mental health issues. These include:

- the development of data collections to monitor reforms in mental health service delivery introduced under the NMHS;
- the establishment of ongoing national data collections based on records kept by hospitals and mental health services in the community; and
- a population survey conducted in 1997 to establish the prevalence of a range of major mental disorders for Australian adults (SMHWB), described above.

Several other initiatives are now in progress under the NMHS to improve data standards for the collection of information on patients and care provided in institutions and in the community for severe illness.

Some of the activities that should contribute to the improvement of national mental health information are described below.

National Survey of Mental Health and Wellbeing (Child and Adolescent Component)

The Child and Adolescent Component of the SMHWB was conducted in 1998. Information was collected on young people aged 4 to 17 years on the prevalence of mental disorders, measures of mental health, functional impairment, service utilisation, and exposure to risks (including social factors, physical health, mental health of parents and self-harm behaviours). The results from the survey are expected to become available in 1999.

National Survey of Low Prevalence Mental Disorders

A study of low prevalence, severe mental illness was conducted in 1998 to complement the results of the 1997 SMHWB. A separate study was needed as severe illnesses such as bipolar disorder, schizophrenia and other psychoses have too low a prevalence to cost-effectively generate reliable estimates through random sampling of the general population.

Estimates of one-month and one-year prevalence of severe mental illness in the community are expected to become available in 1999. Information on the extent to which services are being used currently, or have been used in the past (including government-funded specialised psychiatric services, NGOs, and services in the private sector such as general practice), will also become available. The study will also provide an assessment of the personal and social circumstances of people who have a low-prevalence severe mental illness.

National minimum data set for mental health care

A national minimum data set for mental health care has been developed for collecting information on a continuous basis on people who receive health care services for any mental disorder in both hospital and community settings. This will enable data to be collected on the demographic characteristics of patients, clinical diagnoses and how treatment is managed. Data on patients admitted to specialised psychiatric services in hospital will become available over the next two to three years.

Primary mental health care data

Information is needed on primary health care provided by a range of health professionals. In particular, information is required from general practitioners because of the central role they play in the provision of primary health care for mental health problems and disorders.

Few data have been collected on the activities of general practitioners in general, with limited Medicare data being the only source of national routinely collected information. No national data have been available on the 'casemix' of the general practitioners (ie on the characteristics of their patients, the problems or diagnoses managed, and the nature of the management) (AIHW 1998).

In response to this need, the AIHW and the University of Sydney are collaborating on a national, continuous survey of general practitioner activity, entitled 'Bettering the Evaluation and Health Care of Health'. The survey, for which the data collection began in April 1998, will sample about 1,000 general practitioners nationally on a rolling basis. The general practitioners are being asked to provide information on 100 consecutive patients, including home visits and consultations in nursing homes and hospitals.

Record linkage

Record linkage can be a powerful tool in mental health research and monitoring, particularly because of the frequent comorbidity of mental disorders. Linkages with the National Death Index, Medicare Benefits Schedule Database, the Pharmaceuticals Benefits Scheme Database and the National Hospital Morbidity Database will help provide more complete a profile of mental health problems. The Privacy Commissioner has endorsed guidelines developed by the NHMRC to protect privacy that allow, following ethical approval, health records to be linked for statistical and research purposes (Section 95 of the Privacy Act).

Data for Aboriginal peoples and Torres Strait Islanders

The need to improve the quality of health information for Aboriginal peoples and Torres Strait Islanders, including deaths data, has been identified as a national health information priority, and a plan was presented to the October 1997 AHMAC meeting. The Plan's major recommendations include:

- development of specific protocols for the sensitive handling of data concerning Aboriginal peoples and Torres Strait Islanders, with the active involvement of communities;
- establishment of permanent and long-term positions for personnel of Aboriginal and Torres Strait Islander descent, to facilitate substantial improvements in the quality of information;

- ensuring all major health and related collections in all jurisdictions have the capacity to differentiate between Aboriginal peoples and Torres Strait Islanders and other Australians; and
- use of common identification classifications and collection protocols in all major collections.

Representatives from the National Health Information Management Group (NHIMG) and relevant health organisations representing Aboriginal peoples and Torres Strait Islanders are working together to help implement the plan. The ABS and AIHW have accepted leading roles in working with organisations to implement identification of Aboriginal peoples and Torres Strait Islanders in priority information systems. The ABS has this role for vital statistics and the AIHW for hospital separations, perinatal data and cancer registrations.

Data gaps and deficiencies

Although the range of data on mental health status has improved in recent years, gaps still exist. Key areas requiring action are:

- the development and collection of relevant and culturally appropriate data on service delivery and emotional and social wellbeing (mental health) status of Aboriginal peoples and Torres Strait Islanders;
- the establishment of a national collection strategy that targets the treatment needs and management of the care of older Australians with mental health disorders;
- the coordination of a national collection of data from State and Territory mental health case registers; and
- finalisation of a national collection and reporting process for suicide data from the National Coronial Information System (AIHW 1998b).

Further data requirements

There are currently no national data on several of the NHPA indicators for monitoring depression. This makes it difficult to assess the effect of public health measures on the preventing of depression, or the effect of health services and interventions on managing the problem.

Information on some of the depression indicators is presented in Appendix 1. However, there is inadequate information for a number of NHPA indicators. Availability of relevant information was not considered a constraint in designing NHPA indicators. No clear strategies with which to link depression outcomes were developed either. However, the indicators were designed and developed within a *goals and targets* framework. Since the data available for several of the depression indicators are at best a first cut, no attempt has been made to establish baselines at this stage. No targets have been set, either.

A plan is required urgently to develop the information systematically if regular reporting against all the indicators is to occur. Any such information development plan should also consider generating appropriate time series for long-term monitoring.

Statistical issues

Age-standardisation

To control for any effects of differing age structures of populations, direct age-standardisation was applied to death rates, incidence rates, prevalence rates and hospital separation rates. The total estimated resident population of Australia at 30 June 1991 was used as the standard (Table A2.1).

Table A2.1: Age composition of the Australian population by sex, 30 June 1991

Age group	Males	Females	Total
0–4	652,302	619,401	1,271,703
5–9	652,418	619,790	1,272,208
10–14	638,311	603,308	1,241,619
15–19	698,773	665,301	1,364,074
20–24	707,124	689,640	1,396,764
25–29	702,728	696,935	1,399,663
30–34	713,784	711,951	1,425,735
35–39	664,228	664,159	1,328,387
40–44	655,138	639,133	1,294,271
45–49	526,498	502,647	1,029,145
50–54	433,762	413,172	846,934
55–59	367,302	358,648	725,950
60–64	366,779	370,089	736,868
65–69	320,142	351,248	671,390
70–74	228,494	282,261	510,755
75–79	158,993	225,502	384,495
80–84	84,413	145,415	229,828
85 and over	44,220	110,027	154,247
Total	8,615,409	8,668,627	17,284,036

Source: Australian Bureau of Statistics.

The usual convention of using age-specific rates for five-year age groups, as shown in Table A2.1, was followed using the following formula:

$$SR = \Sigma \{R_i \times P_i\}/\Sigma P_i$$

where SR = the age-standardised rate

R_i = the age-specific rate for age group i, and

P_i = the standard population in age group i.

It should be noted that trends in age-standardised rates estimated using this standard population might differ from those obtained using another standard population.

Appendix 2

Short Form-36 (SF-36) scoring

Indicators for eight dimensions of health were derived from responses given to the questions in SF-36. The eight dimensions of health included physical functioning, role limitation due to physical problems, bodily pain, general health, vitality, social functioning, role limitation due to emotional problems, and metal health.

Scoring of health dimensions

Items and scales for the eight dimensions of health were scored in three stages:

- *item recoding*, for those eight items in the scale for which the response categories were listed in reverse order. This stage of scoring also incorporated imputation of missing values where possible. The SF-36 scoring rules allowed for values of missing items to be imputed if at least 50% of the items for a scale were present. The algorithm used in the imputation process substitutes a person-specific estimate for the missing item: the estimate is the average score across completed items in the same scale for that respondent.
- *computing raw scores for each dimension*, by summing across component items; and
- *transforming the raw dimension scores to a 0–100 scale*. The formula used converted the lowest and highest possible score to zero and 100 respectively; scores between these values represented the percentage of the total possible score which had been achieved.

Rural, remote and metropolitan areas classification

The rural, remote and metropolitan areas (RRMA) classification has been developed by the DPIE, and DHSH, based primarily on population numbers and an index of remoteness (DPIE & DHSH 1994). The RRMA categories show a natural hierarchy, providing a model for incremental health disadvantage with rurality and remoteness as risk factors. Based on population density, the following three zones and seven area categories are recognised:

Box A2.1: Structure of the rural, remote and metropolitan areas (RRMA) classification

Zone	*Category*
Metropolitan zone	*Capital cities*
	Other metropolitan centres (urban centres pop'n ≥ 100,000)
Rural zone (index of remoteness <10.5)	*Large rural centres (urban centres pop'n 25,000–99,000)*
	Small rural centres (urban centres pop'n 10,000–24,999)
	Other rural areas (urban centres pop'n < 10,000)
Remote zone (index of remoteness >10.5)	*Remote centres (urban centres pop'n ≥ 5,000)*
	Other remote areas (urban centres pop'n < 5,000)

Appendix 3

Framework for a three-year plan developed at the National Workshop on Depression, November 1997

Promotion and prevention

Goal One:	Promote the understanding of, and need for, an evidence base in preventive mental health strategies.
Goal Two:	Develop and implement a data strategy that provides adequate monitoring and surveillance of population mental health.
Goal Three:	Improve child-bearing processes and outcomes as they relate to mental health.
Goal Four:	Enhance early maternal–infant attachment, maternal/paternal/ infant relationships and family wellbeing.
Goal Five:	Enhance parenting capacities and family harmony/mental health in the pre-school period.
Goal Six	Within school settings, enhance wellbeing and resilience in children and youth in developmentally appropriate ways.
Goal Seven:	Enhance mental health outcomes for adults in settings of increased risk including life transitions and crises. Implement programs in the workplace, in institutional settings and with the unemployed.

Early Interventions

Goal One:	Reduce the duration of untreated disorder.
Goal Two:	Extend the capacity of the service system to respond to identified need.
Goal Three:	Extend the evidence base for early intervention.
Goal Four:	Assess and disseminate information on successful interventions.

Management of depression

Goal One:	Develop and implement best practice guidelines for: detection and identification of depression; and the management of depression.
Goal Two:	Improve access to services.
Goal Three:	Coordinate, integrate and network service delivery and research on depression at the national, state and local level.

Appendix 3

Community education

Goal One:	Improve public recognition of depressive symptoms (as distinct from normal life problems) and general knowledge of services and access.
Goal Two:	Reduce systemic discrimination against those suffering depression.
Goal Three:	Accurate and informed media reporting on depression and mental health issues.

Data needs

Goal One:	Develop a minimum set of depression indicators across the health continuum for reporting at a national level.
Goal Two:	Standardised definitions for: data elements; indicators; and evaluation.
Goal Three:	Produce a depression-related information development plan for the next three years incorporating: new evidence (new or collated); evaluation of existing evidence; and improvement of the quality of data collection and collation.
Goal Four:	Identify indicators for reporting: in 1998 and 2000.

Acronyms and abbreviations

ABS	Australian Bureau of Statistics
ACCHSs	Aboriginal Community Controlled Health Services
AHMAC	Australian Health Ministers' Advisory Council
AIHW	Australian Institute of Health and Welfare
ANAMH	Australian National Association for Mental Health
ANZCMHN	Australian and New Zealand College of Mental Health Nurses
APA	American Psychiatric Association
APS	Australian Psychological Society
ARAFM	Association for Relatives and Friends of the Mentally Ill
ARC	Australian Research Council
BDQ	Brief Disability Questionnaire
CADET	Community Aged Depression Education Therapy
CBT	Cognitive behaviour therapy
CIDI	Composite International Diagnostic Interview
CSDA	Commonwealth/State Disability Agreement
DHFS	Commonwealth Department of Health and Family Services
DHHS	Department of Health and Human Services, United States
DPIE	Commonwealth Department of Primary Industries and Energy
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders, fourth edition
DSS	Commonwealth Department of Social Security
DVA	Commonwealth Department of Veterans' Affairs
ECT	Electroconvulsive therapy
FEPP	Focused Educational and Psychological Therapy Program
HRT	Hormone replacement therapy
ICD-9	International Classification of Diseases, ninth revision
ICD-10	International Classification of Diseases, tenth revision
ICIDH	International Classification of Impairments, Disabilities and Handicaps
LSIA	Longitudinal Survey of Immigrants to Australia
MAOIs	Monoamine oxidase inhibitors
MBS	Medicare Benefits Schedule

Acronyms and abbreviations

MCS	Mental Component Summary
MH-CASC	Mental Health Classification and Service Costs
MIEA	Mental Illness Education Australia
MOS	Medical Outcomes Study
NACCHO	National Aboriginal Community Controlled Health Organisation
NDAP	National Depression Action Plan
NGO	Non-government organisation
NHIMG	National Health Information Management Group
NHMRC	National Health and Medical Research Council
NHPAs	National Health Priority Areas
NHPC	National Health Priority Committee
NHS	National Health Survey
NMHS	National Mental Health Strategy
NNAAMI	National Network of Adult and Adolescent children who have Mentally Ill parents
PaNDa	Post and AnteNatal Depression Association
PCS	Physical Component Summary
PPAP	Promotion and Prevention Action Plan
PTSD	post-traumatic stress disorder
RACGP	Royal Australian College of General Practitioners
RANZCP	Royal Australian and New Zealand College of Psychiatrists
RAP-A	Resourceful adolescent project for adolescents
RAP-P	Resourceful adolescent project for parents
RFPS	Risk Factor Prevalence Survey
RRMA	Rural, remote and metropolitan areas
SERUs	Support and Evaluation Resource Units
SF-12	Short Form-12
SF-36	Short Form-36
SMHWB	Survey of Mental Health and Wellbeing
SMR	Standardised Mortality Ratio
SSRIs	Selective serotonin reuptake inhibitors
TCAs	Tricyclic antidepressants

TMS	Transcranial Magnetic Stimulation
WHO	World Health Organization

Glossary of terms

Aetiology (etiology)

All the factors that contribute to the development of an illness or disorder.

Affective disorders (mood disorders)

This is a term that can be used to describe all those disorders that are characterised by mood disturbance. Disturbances can be in the direction of elevated expansive emotional state or in the opposite direction, a depressed emotional state.

Alcoholism

A behavioural disorder in which consumption of alcoholic beverages is excessive and impairs health and social and occupational functioning; a physiological dependence on alcohol.

Antidepressant

A drug that alleviates depression, usually by energising the person and thus elevating mood.

Anxiety

An unpleasant feeling of fear or apprehension accompanied by increased physiological arousal.

Antixiolytics

Tranquillizers; drugs that reduce anxiety.

Assessment

Ongoing process beginning with first client contact and continuing throughout the intervention and maintenance phases to termination of contact. The major goals of assessment are: (a) identification of vulnerable or likely cases; (b) diagnosis; (c) choice of optimal treatment; and (d) evaluation of the effectiveness of the treatment.

Attempted suicide

The deliberate or ambivalent act of self-destruction, or other life-threatening behaviour, not resulting in death.

Best practice guidelines

Best practice is the benchmark against which programs can be evaluated. Best practice guidelines are statements based on the careful identification and synthesis of the best available evidence in a particular field. They are intended to assist people in that field, including both practitioners and consumers, to make the best use of the available evidence.

Bipolar disorder

A mood disorder characterised by the presence of history of manic (or hypomanic) episodes usually alternated with depressive episodes. (A history of depressive episodes is not required for all categories of bipolar disorder.)

Biopsychosocial approach

An holistic approach that considers all the interacting biological, psychological and social factors that contribute to disorder.

Carer

A person whose life is affected by virtue of a close relationship and a caring role with a consumer.

Glossary of terms

Chronic

Of lengthy duration or recurring frequently, often with progressive seriousness.

Cognitive behaviour therapy

A short-term goal-oriented psychological treatment. The two guiding principles are: how we behave (including how we feel) is learned through experience, and therefore may often be changed or unlearned; and thought processes directly impact on the person. The person is encouraged to examine negative perceptions and interpretations of their experiences. They are also taught problem-solving techniques.

Comorbidity

The co-occurrence of two or more disorders such as depressive disorder with anxiety disorder or depressive disorder with anorexia.

Community education

An organised campaign designed to increase awareness of an issue.

Conduct disorder

Condition characterised by aggressive, destructive, deceitful and rule-breaking behaviours. Defined according to standard psychiatric criteria.

Consumer

A person utilising, or who has utilised, a mental health service.

Counsellor

At present, anyone in Australia can call himself or herself a counsellor, therapist or psychotherapist. There are, however, credentialling bodies for counsellors, such as the Australian Body of Certified Counsellors and a range of professional organisations that offer standards, codes of practice, ethical guidelines and continuing education such as the Australian Psychological Society, the Psychotherapy and Counselling Federation of Australia and the Australian National Network of Counsellors.

Cyclothymia

A mood disorder of at least two years' duration (one year in adolescents) characterised by numerous periods of mild depressive symptoms not sufficient in duration or severity to meet criteria for major depressive episodes, interspersed with periods of hypomania.

Dementia

Deterioration of mental faculties—of memory, judgment, abstract thought, control of impulses, intellectual ability—that impairs social and occupational functioning and may eventually alter the personality.

Depressed mood

A sad or unhappy mood. May be assessed by self-report questionnaire.

Depression workforce

The depression workforce primarily comprises psychiatrists, psychologists, mental health nurses, general practitioners, some primary care workers, and some occupational therapists.

Depressive disorder

A constellation of disturbances in emotional, behavioural, somatic and cognitive functioning defined according to clinically derived standard psychiatric diagnostic criteria.

Diagnosis

A decision based on the recognition of clinically relevant symptomatology, the consideration of causes that may exclude a diagnosis of another condition, and the application of clinical judgment.

Dysthymia

A mood disorder characterised by depressed mood and loss of interest or pleasure in customary activities, with some additional signs and symptoms of depression, that is present most of the time for at least two years (one year in adolescents).

Effectiveness

The extent to which an intervention does more good than harm for the patient when used under 'normal' circumstances.

Efficacy

The extent to which an intervention does more good than harm for the patient when applied under 'ideal' conditions.

Epidemiology

The study of statistics and trends in health as applied to the whole community.

Evaluation

The process of measuring the value or worth of a program or service.

Evidence-based practice

A process through which professionals use the best available evidence integrated with professional expertise to make decisions regarding the care of an individual. It is a concept which is now widely promoted in the medical and allied health fields and requires practitioners to seek the best evidence from a variety of sources; critically appraise that evidence; decide what outcome is to be achieved; apply that evidence in professional practice; and evaluate the outcome. Consultation with the client is implicit in the process.

Follow-up study

A research procedure whereby individuals observed in an earlier investigation are contacted at a later time for further study.

Hypomania

An episode of illness that resembles mania, but is less intense and less disabling. The state is characterised by an euphoric mood, unrealistic optimism, increased speech and activity, and a decreased need for sleep. For some, there is increased creativity, while others evidence poor judgment and impaired function.

Interpersonal psychotherapy

A time-limited psychotherapy approach that aims at clarification and resolution of one or more of the following interpersonal difficulties: role disputes, social isolation, role transition.

Indigenous

Includes people of Aboriginal and Torres Strait Islander descent and other native islander communities within Australia.

Maintenance treatment

Treatment designed to prevent a new mood episode.

Management

Ongoing process beginning with initial client contact and encompassing all practitioner actions in relation to a particular client. Includes assessment/evaluation, education of the person and family or carer(s), diagnosis, treatment, addressing problems of adherence to treatment, and liaison with or referral to other agencies.

Mania

Illness characterised by hyperexcitability, euphoria, and hyperactivity. Rapid thinking and speaking, agitation, a decreased need for sleep, and a marked increase in energy are nearly always present. During manic episodes, some patients also experience hallucinations or delusions.

Mental disorder

A recognised, medically diagnosable disorder, which results in a significant impairment of an individual's cognitive, social or emotional abilities and may require intervention.

Mental health

The capacity of individuals and groups to interact with one another and the environment, in ways that promote subjective wellbeing, optimal development and use of mental abilities (cognitive, affective and relational). The achievement of individual and collective goals consistent with justice is central to a positive state of mental health.

Mental health problem

A disruption in the interactions between the individual, the group and the environment, producing a diminished state of mental health.

Mental health literacy

The ability to recognise specific disorders; knowing how to seek mental health information; knowledge of risk factors and causes, of self-treatments and of professional help available, and attitudes that promote recognition and appropriate help-seeking.

Mental health problems

Diminished cognitive, emotional or social abilities but not to the extent that the criteria for a mental disorder are met.

Mental health professionals

Professionally trained people working specifically in mental health, such as social workers, occupational therapists, psychiatrists, psychologists and psychiatric nurses.

Mental health promotion

Action to maximise mental health and wellbeing among populations and individuals.

Meta-analysis

A systematic review that employs statistical methods to combine and summarise the results of several studies.

Outcome

A measurable change in the health of an individual, or group of people or population, which is attributable to an intervention or series of interventions.

Perinatal

Relating to the period shortly prior to and shortly after the birth of a baby.

Peer education

The use of identified and trained peers to provide information aimed at increasing awareness of influencing behaviour change.

Placebo

An inactive therapy or chemical agent, or any attribute or component of such a therapy or chemical, that may affect a person's behaviour for reasons related to their expectation of change.

Population-based interventions

Population-based interventions are targeted to populations, rather than high risk individuals or high-risk groups. These interventions include whole population activities as well as those activities deliberately targeted to population subgroups such as rural or Indigenous peoples.

Prevalence

The proportion of the population with the disease/disorder.

Preventive interventions

Programs designed to decrease the incidence, prevalence and negative outcomes of depression.

- Universal—preventive programs applied to the entire population.
- Selective—preventive programs applied to groups or individuals at increased risk of developing the disorder.
- Indicated—preventive programs targeted at high risk individuals on the basis of the individual's minimal, but detectable, behaviours or symptoms that could later develop into a full blown disorder.

Public health framework

Public health describes those activities that aim to benefit a population rather than individuals. Prevention, protection and promotion are emphasised, as distinct from treatment tailored to the needs of individuals with symptoms. A public health approach is structured around the continuum of primary, secondary and tertiary prevention.

Primary care

In the health sector generally, 'primary care' services are provided in the community by generalist providers who are not specialists in a particular area of health intervention. For example, general practitioners, Aboriginal health workers, pharmacists and community health workers provide primary health care. Specialist care, or tertiary services, may be provided by accident and emergency services, hospital wards, youth health or mental health services.

Psychologist

While there are various governing laws throughout the States and Territories of Australia, a practitioner is not allowed to call himself or herself a 'psychologist' unless the required training has been undertaken and they are registered with the relevant state registration body.

Psychiatrist

Medical practitioner with specialist training in psychiatry.

Randomised controlled trial

Research study where participants are allocated at random to receive one of two or more alternative forms of care with the aim of creating unbiased treatment groups for comparison.

Reliability

The extent to which a test, measurement or classification system produces the same scientific observation each time it is applied.

Risk factors

Those characteristics, variables, or hazards that, if present for a given individual, make it more likely that this individual, rather than someone selected at random from the general population, will develop a disorder.

Risk-taking behaviours

Behaviours in which there is some risk of immediate or later self-harm. Risk-taking behaviours might include activities such as dangerous driving, graffiti, train surfing, and self-harming substance use. Some authors see risk-taking behaviours as coping strategies for psychological pain, and others refer to the role of risk-taking in the transition from childhood to adulthood, especially for males.

Self-harm

This includes the various methods by which people may harm themselves, such as self-laceration, self-battering, taking overdoses, or deliberate recklessness. Recent research suggests that self-harm is more common than attempted suicide, and is a serious youth health problem.

Socioeconomic status

A relative position in the community as determined by occupation, income and amount of education.

Stakeholders

The different groups that are affected by decisions, consultations and policies.

Stressor

An event that occasions a stress response in a person.

Substance misuse

The use of a drug to an extent that the person is often intoxicated throughout the day and fails in important obligations and in attempts to abstain, but where there is not necessarily physical dependence.

Substance dependence

The misuse of a drug accompanied by a physiological dependence on it, made evident by tolerance and withdrawal symptoms.

Substance use disorders

Disorders in which drugs are used to such an extent that behaviour becomes maladaptive; social and occupational functioning is impaired, and control or abstinence becomes impossible. Reliance on the drug may be psychological, as in substance misuse, or physiological, as in substance dependence.

Suicide

Suicide is a conscious act to end one's life. By conscious act, it is meant that the act undertaken was done in order to end the person's life.

Suicidal behaviour

Suicidal behaviour includes the spectrum of activities related to suicide and self harm including suicidal thinking, self-harming behaviours not aimed at causing death and suicide attempts. Some writers also include deliberate recklessness and risk-taking behaviours as suicidal behaviours.

Symptom

An observable physiological or psychological manifestation of a disorder or disease, often occurring in a group to constitute a syndrome.

References

Amata PR & Keith B (1991) Parental divorce and the well-being of children: A metanalysis. *Psychological Bulletin*, 110: 26–46.

American Psychiatric Association (APA) (1996) *Practice guidelines for major depressive disorder in adults.* American Psychiatric Association, Washington DC.

American Psychiatric Association (APA) (1994) *Diagnostic and statistical manual of mental disorders*. Fourth edition. American Psychiatric Association, Washington DC.

Ames D (1993) Depressive disorders among the elderly in long-term institutional care. *Australian and New Zealand Journal of Psychiatry*, 27: 378–391.

Ames D, Ashby D, Mann A et al (1988) Psychiatric illness in elderly residents of homes in one London borough. Part III. Prognosis and review. *Age and Aging*, 17: 247–256.

Anda RF, Williamson DF, Escobedo LG et al (1990) Depression and the dynamics of smoking: A national perspective. *Journal of the American Medical Association*, 264: 1541–1545.

Anderson JC, Williams S, McGee R et al (1987) DSM-III disorders in pre-adolescent children: Prevalence in a large sample from the general population. *Archives of General Psychiatry*, 44: 69–76.

Anderson P, Bhatia K & Cunningham J (1996) Occasional Paper: *Mortality of Indigenous Australians.* ABS Cat No 3315.0, AIHW Cat No IHW1. ABS, Canberra.

Angold A & Costello EJ (1993) Depressive comorbidity in children and adolescents: Empirical, theoretical and methodological issues. *American Journal of Psychiatry*, 150: 1779–1791.

Angold A, Costello EJ & Worthman CM (1998) Puberty and depression: The roles of age, pubertal status, and pubertal timing. *Psychological Medicine*, 28: 51–61.

Aoun S (1997) General practitioners' needs and perceptions in rural mental health care. *Australian Journal of Rural Health*, 5: 80–86.

Aoun S, Underwood R & Rouse I (1997) Primary mental health care in a rural community: Patient and illness profiles, treatment and referral. *Australian Journal of Rural Health*, 5: 37–42.

Australian Bureau of Statistics (ABS) (1998) *Mental health and wellbeing: Profile of adults, Australia*. Cat No 4326.0. ABS, Canberra.

Australian Bureau of Statistics (ABS) (1997a) *1995 National Health Survey: Summary of results, Australia.* Cat No 4364.0. ABS, Canberra.

Australian Bureau of Statistics (ABS) (1997b) *1995 National Health Survey: SF-36 population norms, Australia.* Cat No 4399.0. ABS, Canberra.

Australian Bureau of Statistics (ABS) (1997c) *The health and welfare of Australia's Aboriginal and Torres Strait Islander Peoples.* ABS Cat No 4704.0, AIHW Cat No IHW2. ABS, Canberra.

Australian Bureau of Statistics (ABS) (1994) *Suicides in Australia 1982–1992.* Cat No 3309.0 ABS, Canberra.

References

Australian Health Ministers (1992) *National mental health policy.* AGPS, Canberra.

Australian Institute of Health and Welfare (AIHW) (1998a) *Australia's health 1998: The sixth biennial health report of the Australian Institute of Health and Welfare.* AGPS, Canberra.

Australian Institute of Health and Welfare (AIHW) (1998b) *Australian hospital statistics 1996–97.* AIHW Cat No HSE 5. AIHW, Canberra.

Australian Institute of Health and Welfare (AIHW) (1997a) *Australia's welfare 1997: Services and assistance.* AIHW, Canberra.

Australian Institute of Health and Welfare (AIHW) (1997b) *Medical labour force 1996.* AIHW Cat No HWL 10, National Health Labour Force Series No 13, AIHW, Canberra.

Australian Institute of Health and Welfare (AIHW) & Commonwealth Department of Health and Family Services (DHFS) (1997) *First report on national health priority areas 1996.* AIHW Cat No PHE 1. AIHW & DHFS, Canberra.

Baer L, Jacobs DG, Cukor P et al (1995) Automated telephone screening survey for depression. *Journal of the American Medical Association,* 273: 1943–1944.

Barnett B (1995) Preventive intervention: Pregnancy and early parenting. In Raphael B & Burrows G, eds, *Handbook on preventive psychiatry.* Elsevier Science, Amsterdam.

Barnett PA & Gotlib IH (1988) Psychosocial functioning and depression: Distinguishing among antecedents, concomitants, and consequences. *Psychological Bulletin,* 104(1): 97–126.

Barraclough B, Bunch J, Nelson B et al (1974) A hundred cases of suicide: Clinical observations. *British Journal of Psychiatry,* 125: 355–373.

Beardslee WR, Hoke L, Weelock I et al (1992) Initial findings on preventive interaction for families with parental affective disorders. *American Journal of Psychiatry,* 149: 1335–1340.

Beardslee WR & Podorefsky D (1988) Resilient adolescents whose parents have serious affective and other psychiatric disorders: Importance of self understanding and relationships. *American Journal of Psychiatry,* 145(1): 63–69.

Beautrais AL, Joyce PR, Mulder RT et al (1996) Prevalence and comorbidity of mental disorders in persons making serious suicide attempts: A case-control study. *American Journal of Psychiatry,* 153(8): 1009–1014.

Beck AT (1967) *Depression: Clinical, experimental, and theoretical aspects.* Harper & Row, New York.

Beck AT & Steer RA (1987) *Beck Depression Inventory manual.* The Psychological Corporation, New York.

Beckinsale P (1999) *Youth suicide issues in Australian general practice.* Royal Australian College of General Practitioners (RACGP), Adelaide.

Belsher G, Wilkes TCR & Rush CJ (1995) An open, multi-site pilot study of cognitive-therapy for depressed adolescents. *Journal of Psychotherapy Practice and Research*, 4: 52–66.

Black K & Maples J (1999) *Disability support services provided under the CSDA: National data 1997.* AIHW Cat No DIS 12. AIHW, Canberra.

Black D & Young B (1995) Bereaved children: Risk and preventive intervention. In Raphael B & Burrows G, eds, *Handbook on preventive psychiatry*. Elsevier Science, Amsterdam.

Blackburn IM & Moore RG (1997) Controlled acute and follow-up trial of cognitive therapy and pharmacotherapy in out-patients with recurrent depression. *British Journal of Psychiatry*, 171: 328–334.

Blair-West GW & Mellsop GW (1997) Down-rating lifetime suicide risk in major depression. *Acta Psychiatrica Scandinavia*, 95(3): 259–63.

Bloom BL, Hodges WF & Caldwell RA (1982) Preventive intervention programs with the newly separated: Initial evaluation. *American Journal of Community Psychology*, 10 (3), 251–264.

Bloom BL, Hodges WF, Kern MB & McFaddin SC (1985) A preventive intervention program for the newly separated. *American Journal of Orthopsychiatry*, 55: 9–26.

Bowers J, Jorm AF, Henderson S & Harris P (1990) General practitioners' detection of depression and dementia in elderly patients. *Medical Journal of Australia*, 153: 192–196.

Boyce P (1995) Postnatal depression. In Browne P & Ku H, Eds, *Update in Women's Health*. Merck Sharp Dohme University Programme for General Practitioners, Alpha Biomedical Communications, pp139–148.

Boyce P, Harris M, Silove D et al (1998) Psychosocial factors associated with depression: A study of socially disadvantaged women with young children. *Journal of Nervous & Mental Disease*, 186(1): 3–11.

Boyce P & Stubbs J (1994) The importance of postnatal depression. *Medical Journal of Australia*, 161: 471–472.

Boyd JH & Weissman MM (1981) Epidemiology of affective disorders: A reexamination and future directions. *Archives of General Psychiatry*, 38: 1039–1046.

Brodaty H & Gresham M (1989) Effect of a training programme to reduce stress in carers of patients with dementia. *British Medical Journal*, 299: 1375–1380.

Brown C & Schulberg HC (1998) Diagnosis and treatment of depression in primary medical care practice: The application of research findings to clinical practice. *Journal of Clinical Psychology*, 54: 303–314.

Brown WJ, Young AF & Byles JE (1997) *Women's health Australia: A health profile of mid-life rural women.* National Rural Public Health Forum.

Bryant (1997) Long-term outcome of motor vehicle accident injury. *Psychosomatic Medicine*, 59(6): 578–84.

References

Buckingham B, Burgess P, Solomon S et al (1998) *Developing a casemix classification for mental health services*. DHFS, Canberra.

Buist A & Janson H (1995) Effect of exposure to dothiepin and northiaden in breast milk on child development. *British Journal of Psychiatry*, 167(3): 370–373.

Burvill PW (1995) Recent progress in the epidemiology of major depression. *Epidemiological Reviews*, 17(1): 21–31.

Byrne A & Byrne DG (1993) The effect of exercise on depression, anxiety and other mood states: A review. *Journal of Psychosomatic Research*, 37: 565–74.

Cade JFJ (1949) Lithium salts in the treatment of psychiatric excitement. *Medical Journal of Australia*, 2: 349–352.

Carr VJ & Reid ALA (1996) Seeking solutions for mental health problems in general practice. *Medical Journal of Australia*, 162: 435–436.

Chipps J, Stewart G & Sayer G (1995) Suicide mortality in NSW: Clients of mental health services. *NSW Public Health Bulletin*, 68: 75–81.

Chochinov HM, Wilson KG, Enns M & Lander S (1994) Prevalence of depression in the terminally ill: Effects of diagnostic criteria and symptom threshold judgements. *American Journal of Psychiatry*, 151(4): 537–540.

Clarke GN, Hawkins W, Murphy M et al (1995) Targeted prevention of unipolar depressive disorder in an at-risk sample of high school adolescents: A randomized trial of group cognitive intervention. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34: 312–321.

Clarke GN, Hawkins W, Murphy M & Sheeber L (1993) School-based primary prevention of depressive symptomatology in adolescents: Findings from two studies. *Journal of Adolescent Research*, 8: 183–204.

Clarkin JF, Pilkonis PA & Magruder KM (1996) Psychotherapy of depression: Implications for reform of the health care system. *Archives of General Psychiatry*, 53: 717–723.

Cohen HW (1997) *Depression and myocardial infarction in treated hypertensive patients*. Poster presentation to the 70th Scientific Session to the American Heart Association, November 9–12, Orlando, Florida.

Commonwealth Department of Health and Family Services (DHFS) (1998) *National mental health report 1996. Fourth annual report. Changes in Australia's mental health services under the National Mental Health Strategy 1995–96*. DHFS, Canberra.

Commonwealth Department of Health and Family Services (DHFS) (1997) *Second National Mental Health Plan*. AGPS, Canberra.

Commonwealth Department of Health and Family Services (DHFS) (1994) *Better health outcomes for Australians*. AGPS, Canberra.

Commonwealth Department of Health and Human Services (DHHS) (1989) *Mental health discussion paper*. Discussion paper presented to the Australian Health Ministers' Advisory Council, October 1989, AGPS, Canberra.

Commonwealth Department of Health and Family Services (DHFS) & Australian Institute of Health and Welfare (AIHW) (1998a) *National Health Priority Areas report: Injury prevention and control 1997*. AIHW Cat No PHE 3. DHFS and AIHW, Canberra.

Commonwealth Department of Health and Family Services (DHFS) & Australian Institute of Health and Welfare (AIHW) (1998b) *National Health Priority Areas report on cancer control 1997*. DHFS and AIHW, Canberra.

Commonwealth Department of Social Security (DSS) (1998) *Pensions database. Quarter 1, 1998*. DSS, Canberra.

Commonwealth Department of Veterans' Affairs (DVA) (1998) *Morbidity of Vietnam veterans: A study of the health of Australia's Vietnam veteran community. Volume 1.Male Vietnam veterans survey and community comparison outcomes*. DVA, Canberra.

Commonwealth of Australia Health and Medical Research Strategic Review (1998) *The virtuous cycle—Working together for health and medical research*. AGPS, Canberra.

Cooper PJ & Murray L (1998) Postnatal depression. *British Medical Journal*, 316: 1884–1886.

Cronkite K (1994) *On the edge of darkness: Conversations about conquering depression*. Doubleday, New York.

Cubis J (1994) Synopsis of relevant findings on Australian adolescent depression, adapted from doctorate thesis titled 'Minor psychiatric morbidity in mid to late adolescence, changes in prevalence and relationships with parental perception'. Report to NHMRC Working Party on the Identification, Assessment, Diagnosis, Prevention and Management of Depression in Young People.

Davis D, Fox F, Wentz D et al (1997) *The physician as learner: Linking research to practice*. American Medical Association Washington DC.

Davis DA & Taylor-Vaisey A (1997) Translating guidelines into practice. A systematic review of theoretic concepts, practical experience and research evidence in the adoption of clinical practice guidelines. *Canadian Medical Association Journal*, 157: 408–416.

de Looper M & Bhatia K (1998) *Australia's health: International comparisons*. AIHW Cat No PHE 8. AIHW, Canberra.

Dent OF (1999) Long-term health consequences of wartime imprisonment: A review of the Concord Hospital POW Project. *Australasian Journal on Ageing*, in press.

Dudley M, Kelk N, Florio T et al (1997) Suicide among young Australians 1964–1993: A comparison with metropolitan trends. *Social Psychiatry and Psychiatric Epidemiology*, 32: 251–260.

Duke P & Hochman G (1992) *A brilliant madness: Living with manic depressive illness*. Bantam Books, New York.

Eaton WW, Anthony JC, Gallo J et al (1997) Natural history of Diagnostic Interview Schedule/DSM–IV major depression: The Baltimore Epidemiologic Catchment Area follow-up. *Archives of General Psychiatry*, 54: 993–999.

References

Elkin I, Shea MT, Watkins JT et al (1989) National Institute of Mental Health Treatment of Depression Collaborative Research Program: I. General effectiveness of treatments. *Archives of General Psychiatry,* 46: 971–983.

Evans ME, Copeland JRM & Dewey ME (1991) Depression in the elderly in the community: Effect of physical illness and selected social factors. *International Journal of Geriatric Psychiatry,* 6: 787–795.

Folkman S, Lazarus RS, Gruen RJ et al (1986) Appraisal, coping, health status and psychological symptoms. *Journal of Personality and Social Psychology,* 50(3): 571–579.

Forehand R (1992) Parental divorce and adolescent maladjustment. *Behavior Research and Therapy,* 30: 319–327.

Flint AJ & Rifat SL (1997) The effect of treatment on the two-year course of later-life depression. *British Journal of Psychiatry,* 170: 268–272.

Frank E, Kupfer DJ, Perep JM et al (1990) Three-year outcomes for maintenance therapies in recurrent depression. *Archives of General Psychiatry,* 47: 1093–1099.

Frank E, Kupfer DJ, Wagner EF et al (1991) Efficacy of interpersonal psychotherapy as a maintenance therapy of recurrent depression: Contributing factors. *Archives of General Psychiatry,* 48: 1053–1059.

Frassure-Smith N & Lesperance F (1995) Depression and 18-month prognosis after myocardial infarction. *Circulation,* 91: 999–1005.

Friedhoff AJ (1994) Consensus development conference statement: Diagnosis and treatment of depression in late life. In Schneider LS, Reynolds CF, Lebowitz BD & Friedhoff AJ, eds, *Diagnosis and treatment of depression in late life.* American Psychiatric Press, Washington DC.

Garrison CZ, Waller JL, Cuffe SP et al (1997) Incidence of major depressive disorder and dysthymia in young adolescents. *Journal of American Academy of Child and Adolescent Psychiatry,* 36: 458–465.

Giaconia RM, Reinherz HZ, Silverman AB et al (1994) Ages of onset of psychiatric disorders in a community population of older adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry,* 33(5): 706–717.

Gillham JE, Reivich KJ, Jaycox LH & Seligman ME (1995) Prevention of depressive symptoms in schoolchildren: Two year follow up. *American Journal of Psychology,* 6 (6): 343–351.

Gloaguen V, Cottraux J, Cucherat et al (1998) A meta-analysis of the effects of cognitive therapy in depressed patients. *Journal of Affective Disorders,* 49: 59–72.

Goldney RD & Harrison J (1998) Suicide in the elderly: Some good news. *Australasian Journal on Ageing,* 17(2): 54–55.

Goodnick PJ (1997) Diabetes mellitus and depression: Issues in theory and treatment. *Psychiatric Annals,* 27: 353–359.

Goodwin F & Jamison KR (1990) *Manic depressive illness.* Oxford University Press, New York.

Gould RA & Clum GA (1993) A meta-analysis of self-help treatment approaches. *Clinical Psychology Review,* 13: 169–186.

Gunnel D & Frankel S (1994) Prevention of suicide: Aspirations and evidence. *British Journal of Psychiatry*, 308: 1227–1233.

Gupta L, Ward JE & Hayward RS (1998) Clinical practice guidelines in general practice: A national survey of recall, attitudes and impact. *Medical Journal of Australia*, 166: 367–368.

Gupta L, Ward JE & Hayward RS (1997) Future directions for clinical practice guidelines: Needs, lead agencies and potential dissemination strategies identified by Australian general practitioners. *Australian and New Zealand Journal of Public Health*, 21: 495–499.

Halford WK (1995) Marriage and the prevention of psychiatric disorder. In Raphael B & Burrows G, eds, *Handbook on preventive psychiatry*. Elsevier Science, Amsterdam.

Hankin BL, Anderson LY, Moffit TE et al (1998) Development of depression from pre-adolescence to young adulthood: Emerging gender differences in longitudinal Studies. *Journal of Abnormal Psychology*, 107: 128–104.

Harrington R, Fudge H, Rutter M et al (1990) Adult outcomes and adolescent depression. I. Psychiatric status. *Archives of General Psychiatry*, 47: 465–473.

Harris MF, Silove D, Kehag E et al (1996) Anxiety and depression in general practice patients: Prevalence and management. *Medical Journal of Australia*, 164: 526–529.

Harrison J, Moller J & Bordeaux S (1997) Youth suicide and self-injury, Australia. *Australian Injury Prevention Bulletin*, 15 (March). AIHW National Injury Surveillance Unit, Adelaide.

Hayward L, Zubrick SR & Silburn S (1992) Blood alcohol levels in suicide cases. *Journal of Epidemiology and Community Health*, 46: 256–260.

Health Targets and Implementation (Health for All) Committee (1988) *Health for all Australians: Report to the Australian Health Ministers Conference*. AGPS, Canberra.

Henderson AS, Korten AE, Jacomb PA et al (1997) The course of depression in the elderly: A longitudinal community-based study in Australia. *Psychological Medicine*, 27(1): 919–930.

Henriksson MM, Aro HM, Heikinnen ME et al (1993) Mental disorders and comorbidity in suicide. *American Journal of Psychiatry*, 150 (6): 935–940.

Hetherington EM, Bridges M & Insabella GM (1998) What matters? What does not? Five perspectives on the association between marital transitions and children's adjustment. *American Psychologist*, 53: 167–184.

Hickie I, Hooker A, Hadzi-Pavlovic D et al (1996) Fatigue in selected primary care settings: Sociodemographic and psychiatric correlates. *Medical Journal of Australia*, 164: 585–588.

Holdsworth N, Paxton R, Seidel S et al (1996) Parallel evaluations of new guidance materials for anxiety and depression in primary care. *Journal of Mental Health—UK*, 5: 195–207.

References

Howarth E, Johnson J, Klerman GL et al (1992) Depressive symptoms as relative and attributable risk for first onset major depression. *Archives of General Psychiatry,* 49: 817–823.

Human Rights and Equal Opportunity Commission (1997) *Bringing them Home: Report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families.* Sydney, Australia.

Human Rights and Equal Opportunity Commission (1993) *Human rights and mental illness: Report of the National Inquiry into the Human Rights of People with Mental Illness. Vol 2.* AGPS, Canberra.

Hunter E (1992) Aboriginal adolescents in remote Australia. In Kosky R, Eshkevari HS & Kneebone G, eds, *Breaking out. Challenges in adolescent mental health in Australia.* NHMRC, Canberra.

Isaac M, Janca A & Costa Silva JA (1995) A review of the World Health Organization's work on primary care psychiatry. *Primary Care Psychiatry,* 1: 179–185.

Jacobs DG (1995) National Depression Screening Day: Educating the public, reaching those in need of treatment and broadening professional understanding. *Harvard Review of Psychiatry,* 3: 156–159.

Jacobson NS & Hollon SD (1996) Cognitive-behavior therapy versus pharmacotherapy: Now that the jury's returned its verdict, it's time to present the rest of the evidence. *Journal of Consulting and Clinical Psychology,* 64: 74–80.

Jayasuriya L, Sang D & Fielding A (1992) *Ethnicity, immigration and mental illness: A critical review of Australian research.* AGPS, Canberra.

Johnson J, Weismann MW & Klerman GL (1992) Service utilisation and social morbidity associated with depressive symptoms in the community. *Journal of the American Medical Association,* 267(11): 1478–1483.

Joint Consultative Committee in Psychiatry (1997) *Primary care psychiatry—The last frontier.* AGPS, Canberra.

Jorm AF (1987) Sex and age differences in depression: A quantitative synthesis of published research. *Australian and New Zealand Journal of Psychiatry,* 21: 46–53.

Jorm AF, Korten AE, Jacomb PA et al (1999a) Attitudes towards people with a mental health disorder: A survey of the Australian public and health professionals. *Australian and New Zealand Journal of Psychiatry,* in press.

Jorm AF, Rodgers B, Jacomb PA et al (1999b) Smoking and mental health: Results from a community survey. *Medical Journal of Australia,* 170: 74–77.

Jorm AF, Korten AE, Jacomb PA et al (1997a) 'Mental health literacy': A survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia,* 166: 182–186.

Jorm AF, Korten AE, Jacomb PA et al (1997b) Helpfulness of interventions for mental disorders: Beliefs of health professionals compared with the general public. *British Journal of Psychiatry,* 171: 233–237.

Jorm AF, Korten AE, Jacomb PA et al (1997c) Beliefs about the helpfulness of interventions for mental disorders: A comparison of general practitioners, psychiatrists and clinical psychologists. *Australian & New Zealand Journal of Psychiatry,* 31: 844–851.

Judd LL (1997) Pleomorphic expressions of unipolar depressive disease: A summary of 1996 CINP workshop. *Journal of Affective Disorders,* 45: 109–116.

Judd LL, Akiskal HS & Paulus MP (1997) The role and clinical significance of subsyndromal depressive symptoms in unipolar major depressive disorder. *Journal of Affective Disorders,* 45: 5–17.

Judd LL, Paulus MP, Wells KB et al (1996) Socioeconomic burden of subsyndromal depressive symptoms and major depression in a sample of the general population. *American Journal of Psychiatry,* 153(11): 1411–1417.

Kahn JS, Kehle TJ, Jenson WR et al (1990) Comparison of cognitive-behavioural, relaxation and self-monitoring interventions amongst middle-school students. *School Psychology Review,* 19: 196–211.

Kandel DB & Davies M (1986) Adult sequelae of adolescent depressive symptoms. *Archives of General Psychiatry,* 43: 255–262.

Karlson B & Agardh CD (1997) Burden of illness metabolic control and complications in relation to depressive symptoms in IDDM patients. *Diabetic Medicine,* 14: 1066–1072.

Katon W, von Korff M, Lin E et al (1997) Population-based care of depression: Effective disease management strategies to decrease prevalence. *General Hospital Psychiatry,* 19: 169–178.

Keane TM, King LA, King DW et al (1998) *Do war zone stressors predict the development of psychiatric disorders?* Presentation to RMA Conference on Stress and Challenge. February 1998, Brisbane.

Keller MB, Lavori P, Mueller TI et al (1992) Time to recovery, chronicity and levels of psychopathology in major depression: A 5-year prospective follow-up of 431 subjects. *Archives of General Psychiatry,* 49: 809–816.

Kendler KS, Pedersen NL, Farahmand BY & Persson PG (1996) The treated incidence of psychotic and affective illness in twins compared with population expectation: A study in the Swedish Twin and Psychiatric Registries. *Psychological Medicine,* 26(6): 1135–44.

Kessler RC, McGonagle KA, Zhao A et al (1994) Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. *Archives of General Psychiatry,* 51: 8–19.

Kessler RC, Nelson CB, McGonagle KA et al (1996) Comorbidity of DSM-III-R major depressive disorder in the general population: Results from the US national comorbidity survey. *British Journal of Psychiatry,* 168(suppl 30): 17–30.

Kiloh LG & Garside RF (1963) The independence of neurotic and endogenous depression. *British Journal of Psychiatry,* 109: 451–463.

References

Kirkcaldie M, Pridmore S & Pascual-Leonie A (1997) Transcranial magnetic stimulation (TMS) as a therapy in psychiatry. *Australian and New Zealand Journal of Psychiatry*, 31: 263–272.

Kirsch I & Sapirstein G (1998) Listening to Prozac but hearing placebo: A meta-analysis of antidepressant medication. *Prevention and Treatment*, Article 0002a.

Kleinman A & Cohen A (1997) Psychiatry's global challenge. *Scientific American*, 276(3): 74–77.

Kliewer E & Jones R (1997) *Immigrant health and the use of medical services: Results from the Longitudinal Survey of Immigrants in Australia.* Department of Immigration and Multicultural Affairs, Canberra.

Kosky R & Hardy J (1992) Mental health: Is early intervention the key? *Medical Journal of Australia*, 156: 147–148.

Kovacs M, Obrosky DS, Gatsonis C et al (1997) First episode major depressive and dysthymic disorder in childhood: Clinical and socio-demographic factors in recovery. *Journal of American Academy of Child and Adolescent Psychology*, 36: 777–784.

Kupfer DJ, Frank E, Perel JM et al (1992) Five year outcomes for maintenance therapies in recurrent depression. *Archives of General Psychiatry*, 49: 769–773.

Lamberg L (1996) Treating depression in medical conditions may improve quality of life. *Journal of the American Medical Association*, 276(11): 857–858.

Lang M & Tisher M (1983) *Children's Depression Scale (CDS) (9–16 years) Manual –2nd Research edition*. The Australian Council for Educational Research, Hawthorne.

Leeder S (1998) *Social capital and its relevance to health and family policy*. Presentation to the Public Health Association Conference 1998, October, Hobart.

Leginski WA, Crose C, Driggers J et al (1989) *Data standards for mental health decision support systems. A report of the task force to revise the data content and systems guidelines of the Mental Health Statistics Improvement Program.* Department of Health and Human Services, Washington DC.

Lewinsohn PM (1974) A behavioral approach to depression. In Friedman RJ & Katz MM, eds, *The Psychology of Depression: Contemporary Theory and Research*. Winston-Wiley, Washington DC.

Lewinsohn PM, Clarke GN, Hops H et al (1990) Cognitive-behavioral group treatment of adolescent depression. *Behavior Therapy*, 21: 385–401.

Lewinsohn PM, Hops H, Roberts RE et al (1993) Adolescent psychopathology: I. Prevalence and incidence of depression and other DSM-III-R disorders in high school students. *Journal of Abnormal Psychology*, 102: 133–144.

Linde K, Ramirez G, Mulrow CD et al (1996) St John's wort for depression—An overview and meta-analysis of randomised clinical trials. *British Medical Journal*, 313: 253–258.

Luthar SS & Ziegler E (1991) Vulnerability and competence: A review of research on resilience in childhood. *American Journal of Orthopsychiatry*, January: 6–22.

Madden R, Black K & Wen X (1995) *The definition and categorisation of disability in Australia.* AIHW, Canberra.

Markman HJ, Renick MJ, Floyd R et al (1993). Preventing marital distress through communication and conflict management training: A 4-and 5-year follow-up. *Journal of Consulting and Clinical Psychology*, 61: 70–77.

Martinsen EW (1994) Physical activity and depression: Clinical experience. *Acta Psychiatrica Scandinavica*, Supplement 377: 23–27.

Massie MJ, Gagnon P & Holland JC (1994) Depression and suicide in patients with cancer. *Journal of Pain and Symptom Management*, 9(5): 325–338.

Mathers C (1998) *Burden of disease and health system costs of heart disease depression and back problems in Australia.* Paper presented at NHMRC National Forum, Canberra.

Mathers C (1994) *Health differentials among adult Australians aged 25–64 years.* Health Monitoring Series No 1 1999, AGPS, Canberra.

Mathers C & Penm R (1999) *Health system costs of mental disorders in Australia 1993–94.* AIHW, Canberra.

McDaniel JS, Musselman Dl, Porter MR et al (1995) Depression in patients with cancer: Diagnosis, biology and treatment. *Archives of General Psychiatry*, 52: 89–99.

McDonald B and Steel Z. (1997), *Immigrants and Mental Health. An Epidemiological Analysis*. Current Issues in Transcultural Mental Health, Transcultural Mental Health Centre, Springwood, NSW.

McGee R, Feehan M, Williams S et al (1990) DSM-III disorders in a large sample of adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 29: 611–619.

McKendrick JH (1993) Patterns of psychological distress and implications for mental health service delivery in an urban Aboriginal general practice population. Thesis: Doctor of Medicine. University of Melbourne.

McKendrick JH, Cutter T, McKenzie A & Chiu E (1992) The pattern of psychiatric morbidity in a Victorian urban Aboriginal general practice population. *Australian and New Zealand Journal of Psychiatry*, 26(1): 40–47.

McKendrick JH & Thorpe M (1994) The Victorian Aboriginal Mental Health Network: Developing a model of mental health care for Aboriginal Communities. *Australasian Psychiatry*, 2 (5): 219–221.

Minas IH, Lambert TJR, Kostov S & Boranga G (1996) *Mental health services for NESB immigrants.* AGPS, Canberra.

Mitchell PB (1997) Managing depression in a community setting. *Medical Journal of Australia Practice Essentials*, 167: 383–388.

Mittelman S, Ferris SH, Shulman E et al (1996) A family intervention to delay nursing home placement of patients with Alzheimer's disease: A randomized controlled trial. *Journal of the American Medical Association*, 276: 1725–1731.

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References

Moon L, Rahman N, Bhatia K (1998) *Australia's children: their health and wellbeing*. AIHW Cat No PHE 7. AIHW, Canberra.

Moreau D, Mufson L, Weissman MM et al (1991) Interpersonal psychotherapy for adolescent depression: Description of modification and preliminary application. *Journal of American Academy of Child and Adolescent Psychiatry*, 30: 642–651.

Morice R (1978) Psychiatric diagnosis in a transcultural setting. The importance of lexical categories. *British Journal of Psychiatry*, 132: 87–95.

Mrazek P & Haggerty R (1994) *Reducing risks for mental disorders. Frontiers for preventive intervention research*. National Academy Press, Washington DC.

Mufson L, Moreau D, Weissman MM et al (1994) Modification of interpersonal psychotherapy with depressed adolescents (IPT-A): Phase 1 and II Studies. *Journal of American Academy of Child and Adolescent Psychiatry*, 33: 695–705.

Murphy GE & Wetzel RD (1990) The lifetime risk of suicide in alcoholism. *Archives of General Psychiatry*, 47: 383–392.

Murray CJL & Lopez AD (1996) *The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020*. WHO, World Bank & Harvard School of Public Health.

Murray J, Terry DJ, Battistutta D & Conolly Y (1998) Effects of primary health care intervention on parents affected by infant death. Centre for Primary Health Care, University of Queensland.

Musselman DL, Evans DL & Nemeroff CB (1998) The relationship of depression to cardiovascular disease. *Archives of General Psychiatry*, 55: 580–592.

National Health and Medical Research Council (NHMRC) (1997) *Clinical practice guidelines: Depression in young people*. Commonwealth of Australia, Canberra.

Nelson CB, Little RJA, Heath AC et al (1996) Patterns of DSM-III alcohol dependence syndrome progression in a general population survey. *Psychological, Medicine*, 26: 449–460.

Nemeroff CB (1998) The neurobiology of depression. *Scientific American*, 278(6): 28–35.

Nolen-Hoeksema S, Girgus JS & Seligman MEP (1992) Predictors and consequences of childhood depressive symptoms: A 5-year longitudinal study. *Journal of Abnormal Psychology*, 101: 405–422.

NSW Health (1996) *Review of services for Non-English Speaking Background women with postnatal distress/depression*. NSW Health, Sydney.

NSW Health (1994) *Postnatal depression services review, New South Wales*. NSW Department of Health, Sydney.

Nutbeam D, Wise M, Bauman A et al (1993) *Goals and targets for Australia's health in the year 2000 and beyond*. AGPS, Canberra.

O'Brien PE (1996) Clinical practice guidelines (letter). *Medical Journal of Australia*, 164: 54.

O'Hara M (1987) Post partum 'blues', major depressive disorder and psychosis—A review. *Journal of Psychosomatic Obstetrics and Gynaecology*, 7: 205–227.

Offord DR & Bennet KJ (1994) Conduct disorder: Long term outcomes and intervention effectiveness. *Journal of American Child and Adolescent Psychiatry*, 33(9).

O'Toole BI, Marshall RP, Graysor DA et al (1996) The Australian Vietnam Veterans health study. III. Psychological health of Australian Vietnam Veterans and its relation to combat. *International Journal of Epidemiology*, 25: 331–340.

Parker G & Hadzi-Pavlovic D (1996) *Melancholia: A disorder of movement and mood: A phenomenological and neurobiological review*. Cambridge University Press, Cambridge.

Parker G, Roussos J, Hadzi-Pavlovic D et al (1997a) Plumbing the depths: Some problems in quantifying depression severity. *Journal of Affective Disorders*, 42: 49–58.

Parker G, Roy K, Hadzi-Pavlovic D et al (1992) Psychotic (delusional) depression: a meta-analysis of physical treatments. *Journal of Affective Disorders*, 24: 17–24.

Parker G, Wilhelm K & Asghari A (1997b) Early onset of depression: The relevance of anxiety. *Social Psychiatry and Psychiatric Epidemiology*, 32: 30–37.

Parker G, Wilhelm K, Mitchell P et al (1998) The influence of anxiety as a risk to early onset major depression. *Journal of Affective Disorders*, in press.

Parmalee P, Katz I & Lawton M (1989) Depression among the institutionally aged: Assessment and prevalence estimation. *Journal of Gerontology*, 44: M22–M29.

Patton GC, Harris R, Carlin JB et al (1997) Adolescent suicide behaviour: A population-based study of risk. *Psychological Medicine*, 27: 715–724.

Patton GC, Hibbert M & Bowes G (1998) Depression, anxiety and smoking initiation: A prospective study over three years. *American Journal of Public Health*, in press.

Patton GC, Hibbert ME, Carlin J et al (1996a) Menarche and the onset of depression and anxiety in Victoria, Australia. *Journal of Epidemiology and Community Health*, 50: 661–666.

Patton GC, Hibbert M, Rosier MJ et al (1996b) Is smoking associated with depression and anxiety in teenagers? *American Journal of Public Health*, 86: 225–230.

Patton GC, Selzer R, Coffey C et al (1999) The onset of adolescent eating disorders: A population based cohort study over three years. *British Medical Journal*, in press.

Pedro-Carroll JL & Cowen EL (1985) The Children of Divorce Intervention Project: An investigation of the efficacy of a school-based prevention program. *Journal of Consulting and Clinical Psychology*, 53: 603–611.

Perry PD, Pollard RA, Blakely TL et al (1995) Childhood trauma, the neurobiology of adaptation, and 'use dependent' development of the brain: How 'states' become 'traits'. *Infant Mental Health Journal*, 16(4), 271–291.

Peterson C, Maier SF & Seligman MEP (1993) *Learned helplessness: A theory for the age of personal control*. Oxford University Press, New York.

References

Phifer J & Murrell S (1986) Etiological factors in the onset of depressive symptoms in older adults. *Journal of Abnormal Psychology,* 95(3): 282–291.

Phillips C & Henderson A (1991) The prevalence of depression among Australian nursing home residents: Results using draft ICD-10 and DSM-111-R criteria. *Psychological Medicine,* 21: 739–748.

Phongsavan P, Ward JE, Oldenburg BF et al (1995) Mental health care practices and educational needs of general practitioners. *Medical Journal of Australia,* 162: 139–142.

Prince MJ, Harwood RH, Blizard RA et al (1997a) Impairment, disability and handicap as risk factors for depression in old age. The Gospel Oak project V. *Psychological Medicine,* 27, 311–321.

Prince MJ, Harwood RH, Blizard RA et al (1997b) Social support deficits, loneliness and life events as risk factors for depression in old age. The Gospel Oak project VI. *Psychological Medicine,* 27, 323–332.

Proudfoot J, Guest D, Carson J et al (1997). Effect of cognitive behavioural training on job finding among long term unemployed people. *Lancet,* 350: 96–100.

Radloff LS (1977) The CES-D Scale: A self-report depression scale for research with the general population. *Applied Psychological Measurement,* 1: 385–401.

Rajala V, Keinanen-Kiukaanniemi S & Kivela SL (1997) Non insulin dependent diabetes mellitus and depression in a middle aged Finnish population. *Social Psychiatry and Psychiatric Epidemiology,* 32: 363–367.

Raphael B (1977) Preventive interventions with the recently bereaved. *Archives of General Psychiatry,* 34: 1450–1454.

Rey JM (1995) Perceptions of poor maternal care are associated with adolescent depression. *Journal of Affective Disorders,* 34: 95–100.

Reynolds WR & Coats KI (1986) A comparison of cognitive-behavioural therapy and relaxation training for the treatment of depression in adolescents. *Journal of Consulting and Clinical Psychology,* 54: 653–660.

Rosewarne R (1997) *Care needs of people with dementia and challenging behaviour living in residential facilities.* AGPS, Canberra.

Rice MS (1995) Clinical practice guidelines. *Medical Journal of Australia,* 163: 144–145.

Rickwood DJ & Braithwaite VA (1994) Social-psychological factors affecting help-seeking for emotional problems. *Social Science and Medicine,* 39(4): 563–572.

Rush AJ & Weissenburger JE (1994) Melancholic symptoms features and DSM-1V. *American Journal of Psychiatry,* 151:489–498.

Rutter M (1997) Child psychiatric disorder: Measures, causal mechanisms and interventions. *Archives of General Psychiatry,* 54 (9): 785–789.

Rutter M (1991) Age changes in depressive disorders: Some developmental considerations. In Garber & Dodge KA, Eds, *The development of emotional regulation and dysregulation.* Cambridge University Press, Cambridge.

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Rutter M (1987) Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57: 316–331.

Rutter M (1985) Resilience in the face of adversity: Protective factors and resistance to psychiatric disorder. *British Journal of Psychiatry*, 147: 598–611.

Rutter M & Smith DJ (1995) Towards causal explanations of time trends in psychosocial disorders of youth. In Rutter M & Smith DJ, eds, *Psychosocial trends in young people: Time trends and their causes*. Wiley, Chichester, pp782–808.

Rutz W, Carlsson P, von Knorring L et al (1992) Cost-benefit analysis of an educational program for general practitioners by the Swedish Committee for the Prevention and Treatment of Depression. *Acta Psychiatrica Scandinavica*, 85: 457–464.

Sanders MR & Markie-Dadd CL (1996) Triple P: A multilevel family intervention program for children with disruptive disorders. In Cotton P & Jackson H, eds, *Early Intervention and Prevention in Mental Health*. Australian Psychological Society, Melbourne, pp59–87.

Sartorius N, Ustun TB, Lecrubier Y et al (1996) Depression comorbid with anxiety: Results from the WHO study on psychological disorders in primary health care. *British Journal of Psychiatry*, 168 (supp 30): 38–43.

Sawyer MG, Sarris A, Baghurst PA et al (1990) The prevalence of emotional and behaviour disorders and patterns of service utilization in children and adolescents. *Australian and New Zealand Journal of Psychiatry*, 24: 323–330.

Schofield H & Bloch S (1998) Disability and chronic illness: The role of the family carer. *Medical Journal of Australia*, 169: 405–406.

Seidel A, Arolt V, Hunstiger M et al (1996) Major depressive disorder is associated with elevated monocyte counts. *Acta Psychiatrica Scandinavia*, 94: 198–204.

Seligman MEP (1975) *Helplessness: On depression, development and death*. Freeman, San Francisco.

Shaffer D, Gould MS, Fisher P et al (1996) Psychiatric diagnosis in child and adolescent suicide. *Archives of General Psychiatry*, 53: 339–348.

Shapiro PA, Lidagoster L & Glassman AH (1997) Depression and heart disease. *Psychiatric Annals*, 27: 347–352.

Shea MT, Elkin I, Imber SD et al (1992) Course of depressive symptoms over follow-up: Findings from the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Archives of General Psychiatry*, 49: 782–787.

Short JL (1998) Evaluation of a substance abuse prevention and mental health promotion program for children of divorce. *Journal of Divorce and Remarriage*, 28: 139–155.

Silburn SR, Zubrick SR, Garton AF et al (1995) *Western Australian Child Health Survey: Family and community health*. ABS Cat No 4304.5. ABS, Perth.

Silverstone T, McPherson H, Hunt N & Romans S (1998) How effective is lithium in the prevention of relapse in bipolar disorder? A prospective naturalistic follow-up study. *Australian and New Zealand Journal of Psychiatry*, 32: 61–66.

References

Simon GE & VonKorff M (1991) Somatization and psychiatric disorder in the NIMH Epidemiological Catchment Area Study. *American Journal of Psychiatry*, 148: 1494–1500.

Simon GE, VonKorff M, Heiligenstein JH et al (1996) Initial antidepressant choice in primary care: Effectiveness and cost of fluoxetine vs tricyclic antidepressants. *Journal of the American Medical Association*, 275: 1897–1902.

Simpson HB, Nee JC & Endicott J (1997) First episode major depression: Few sex differences in course. *Archives of General Psychiatry*, 54: 633–639.

Sireling LI, Freeling P, Paykel ES & Rao BM (1985) Depression in general practice: Clinical features and comparison with outpatients. *British Journal of Psychiatry*, 147: 119–126.

Snooks GD (1994) *Portraits of the family within the total economy*. Cambridge University Press, Cambridge.

Snowdon J (1998) Management of late-life depression. *Australasian Journal on Ageing*, 17(2): 57–62.

Snowdon J (1987) Psychiatric services for the elderly. *Australian and New Zealand Journal of Psychiatry*, 21: 132.

Spence SH (1996) A case for prevention. In Jackson H & Cotton P, eds, *Early intervention and preventative applications in clinical psychology*. Academic Press, Sydney.

Spiegel D (1996) Cancer and depression. *British Journal of Psychiatry*, 168 (suppl 30): 109–116.

Strong KL, Trickett PJ, Titulaer I & Bhatia K (1998a) *The Health in rural and remote Australia*. Cat no PHE 6, AIHW, Canberra.

Strong KL, Trickett PJ, Bhatia K (1998b) The health of overseas-born Australians. *Australian Health Review*, 21:124–33.

Swan P & Fagan P (1991) *The New South Wales mental health report*. AMS, Redfern.

Swan P & Raphael B (1995) *Ways forward: National consultancy report on Aboriginal and Torres Strait Islander mental health*. AGPS, Canberra.

Thase ME, Greenhouse JB, Frank E et al (1997) Treatment of major depression with psychotherapy or psychotherapy-pharmacotherapy combinations. *Archives of General Psychiatry*, 54: 1009–1015.

Turner J, Meldrum L & Raphael B (1995) Preventive aspects of occupational mental health. In Raphael B & Burrows G, eds, *Handbook on preventive psychiatry*. Elsevier Science, Amsterdam.

United States Department of Health and Human Services (DHHS) (1989) *Promoting health/preventing disease: Year 2000 objectives for the nation*. Public Health Service, US Department of Health and Human Services, Washington DC.

Victorian Foundation for Survivors of Torture (1997) *Annual report*. Victorian Foundation for Survivors of Torture, Victoria.

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Veit FCM, Sance LA, Coffey CMM et al (1996) Barriers to effective primary health care for adolescents. *Medical Journal of Australia*, 165: 131–133.

VonKorff (1998) Collaborative care improved the cost effectiveness of treatment for major depression in primary care. *Evidence Based Mental Health*, I(4): 127.

Vostinia P & Harrington R (1994) Cognitive-behavioural treatment of depressive disorder in child psychiatric patients: Rationale and description of a treatment package. *European Child and Adolescent Psychiatry*, 3: 111–123.

Ward JE & Holt PE (1997) Clinical practice guidelines: To what end? *Medical Journal of Australia*, 167: 287–288.

Ware JE, Snow KK, Kosinski MA & Gandek B (1993) *SF-36 health survey: Manual and interpretation guide.* Nimrod Press, Boston.

Werner E (1992) The children of Kauai: Resilience and recovery in adolescence and adulthood. *Journal of Adolescent Health*, 13: 262–268.

Winefield AH (1995) Unemployment and mental health. In Jorm AF, ed, *Men and mental health*. NHMRC, Canberra.

World Health Organization (WHO) (1996a) *Investing in health and research and development: Summary report of the Ad Hoc Committee on Health Research Relating to Future Intervention Options.* WHO, Geneva.

World Health Organization (WHO) (1996b) *Mental health.* Fact Sheet No 130. WHO, Geneva.

World Health Organization (WHO) (1993) *The ICD-10 classification of mental and behavioural disorders.* WHO, Geneva.

World Health Organization (WHO) (1992) *The ICD-10 classification of mental and behavioural disorders: Clinical descriptions and diagnostic guidelines.* WHO, Geneva.

World Health Organization (WHO) (1981) *Global strategy for health for all by the year 2000.* WHO, Geneva.

Yesavage JA, Brink TL, Rose TL et al (1983) Development and validation of a Geriatric Depression Scale. *Journal of Psychiatric Research*, 17: 31–49.

Zubrick SR & Silburn SR (1996) Suicide prevention. In Cotton P & Jackson H, eds, *Early intervention and prevention in mental health.* Australian Psychological Society, Melbourne, pp193–209.

Zubrick SR, Silburn SR, Garton AF et al (1995) *Western Australian Child Health Survey: Developing health and wellbeing in the nineties.* ABS Cat No 4303.5. ABS, Perth.

Zubrick SR, Silburn SR, Gurin L et al (1997) *Western Australian child health survey: Education, health and competence.* ABS Cat No 4305.5. ABS, Perth.

Zung WK (1965) A self-rating depression scale. *Archives of General Psychiatry*, 12: 63–70.

National Health Priority Areas 1998

Mental Health

The National Health Priority Areas (NHPAs) initiative is a collaboration between the Commonwealth, State and Territory Governments. It seeks to improve the health of Australians by targeting those diseases or conditions which impose a high social and financial cost and with targeted intervention offer the opportunity for significant health gain. The initiative aims to identify the most appropriate promotion, prevention and intervention strategies for the health areas targeted.

The *First Report on National Health Priority Areas 1996* focused on the health of Australians by documenting progress towards goals and targets for the five priority areas of cardiovascular health, cancer control, injury prevention and control, mental health and diabetes mellitus.

The *NHPA Report on Mental Health 1998* focuses on depression and builds on the data and trends provided in the *First Report*, provides overviews of mental health, summarises the current status of mental health activity in Australia and proposes a framework for future collaborative action between all stakeholders.